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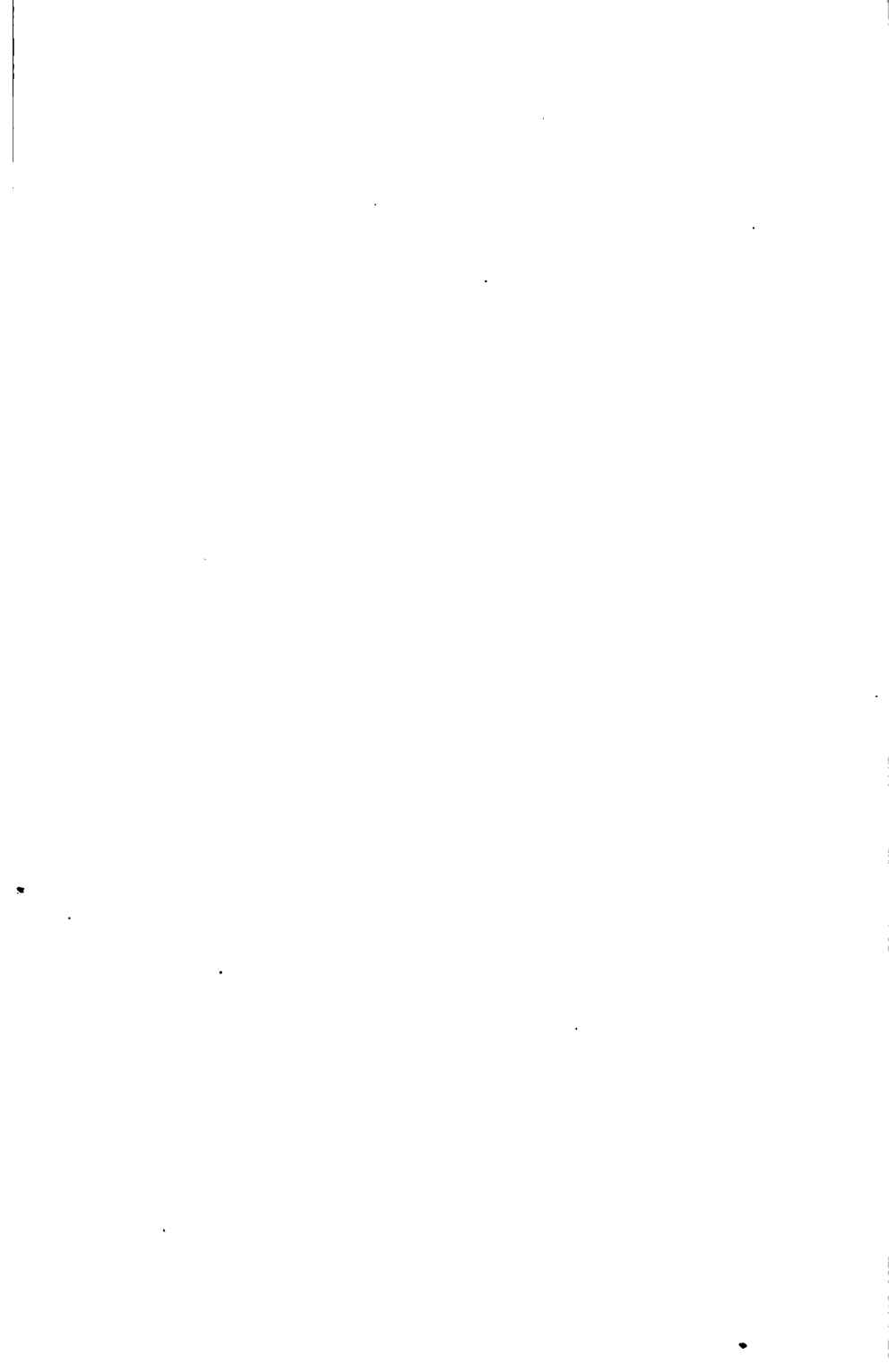
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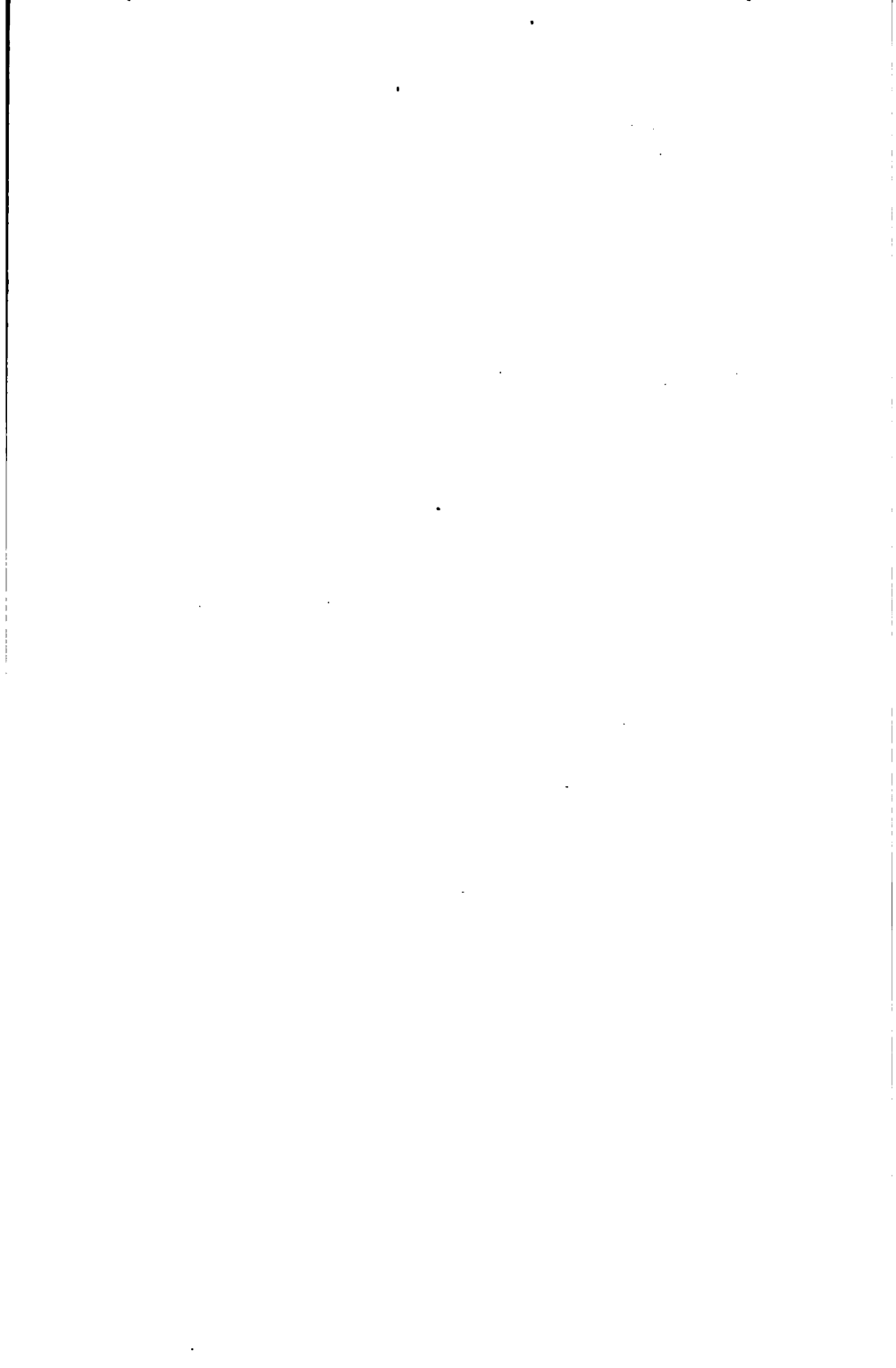
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R A I L W A Y R A T E S :

ENGLISH AND FOREIGN.



RAILWAY RATES:

ENGLISH AND FOREIGN.

BY

J. GRIERSON,

GENERAL MANAGER OF THE GREAT WESTERN RAILWAY.

SECOND THOUSAND.



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PREFACE.

A PART of the information upon which these observations are founded was obtained for my own guidance, in considering the complaints as to Railway rates and the comparisons between railways in the United Kingdom and abroad. At the suggestion of the representatives of some of the Companies the subject was followed up. These observations have expanded beyond my original intentions; but they have been prepared for a limited object; they do not purport to exhaust the subject. I have endeavoured to treat it fairly, and to pay due regard alike to the interests of the traders, the public, and the railway companies; interests which may, to a hasty observer, occasionally appear conflicting, but which, looked at reasonably, and in the light of full information, are seen to be identical.

Though solely responsible for the comments and conclusions, I am indebted for the information upon which they are based to many persons; among others, to several of the Presidents, General Managers, and others connected with

the control of the railways in France, Belgium and Holland ; to Sir Bernhard Samuelson, M.P. (who placed at my disposal the voluminous and useful information which he obtained as to the railways in Germany, Belgium and Holland) ; to some of the General Managers and other Officers of the companies in England, the United States, and Canada ; and to many friends who have been kind enough to supply much information and give valuable assistance.

If the information thus collected helps to clear up some misconceptions, to prevent the adoption of theories as to the fixing of rates which would be most injurious to the trade of the country, and to bring about an equitable and satisfactory settlement of questions now so much discussed, my object will have been attained.

J. GRIERSON.

PADDINGTON,

December 1st, 1886.

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SECTION I.

INTRODUCTION.

FOR many reasons the failure to pass the Railway and Canal Traffic Bill ought not to be regretted even by those who are dissatisfied with railway companies, but who sincerely desire to benefit the trade of the country. In the discussion of that Bill, and in the debates on the subject of railway rates in recent sessions of Parliament, the existence of many misconceptions was disclosed. As to principles, there was little agreement; there was, if possible, still less as to details. Charges which had often been explained or refuted were repeated as if they were new, and as if they had never been answered. One of the greatest defects of the discussion was its fragmentary, one-sided character; it was carried on with far too little regard to the interests of many classes, districts, and ports which would have been seriously injured by some of the changes hastily proposed. Many of those who professed to represent traders ignored the interests of large sections of them; and what would benefit consumers was, to a remarkable degree, lost sight of. The delay may be useful; and it may be hoped that any future legislation will be shaped according to the interests of all traders, and not of a part of them only, and of the general public, to whom extended

and not restricted trade, cheapness, and a wide area of supply are desirable.

The following observations do not attempt to correct or remove all the misconceptions in circulation, or to answer all the charges against English railway companies. Many of such charges are so vague as to elude refutation; they appear formidable, but only formidable because they are indefinite. Nor is this an attempt to show that, with regard to railway working and rates, all is done for the best by the companies. Considering the fact that the rates are numbered by millions, and the variety of interests which they affect—considering, too, the fact that this is an island with numerous ports, companies and trading interests, all competing with each other—it would be amazing if there were no anomalies and defects. The present purpose is only to show that of the charges brought against railway companies some are erroneous; that some are exaggerated; that many are of a contradictory character; that some are complaints of evils which railway companies did not create and cannot alter; and that other supposed grievances could not be removed without injury to the community. It has recently been stated in Parliament that “this is the first time that traders have had an opportunity of going before a tribunal and putting their views fairly before it.”¹ This betrays forgetfulness of the fact that, as lately as 1881 and 1882, during two sessions, a Select Committee heard the complaints of all persons who believed that they had grievances to relate. The statement, too, inadvertently ignores the fact that, when the companies submitted in the session of

⁽¹⁾ Mr. Forwood. Debate on second reading of Railway and Canal Traffic Bill, 6th May, 1886. Hansard, vol. cccv. 446.

1885 Bills to Parliament, and thus offered a further opportunity of inquiry, Chambers of Commerce and other persons professing to represent trades refused to avail themselves of the opportunity, and prevented the investigation taking place. English railway companies need not dread a thorough examination of their working, or a comparison with any foreign system. They need be apprehensive only of a vague uninstructed notion that "something must be done;" of legislation adopted, if not in a panic, in a time of greatly depressed trade; of crude one-sided proposals made on behalf of a part of the interests concerned by persons who have not sufficiently examined and considered all the consequences of their schemes; and of the application of a standard of perfection supposed to exist somewhere, but in truth nowhere realized.

The continued depression of trade, the necessary efforts to reduce the cost of production, jealousy of foreign competition, misapprehensions fostered by agitation, as to the commercial effects of "special," "import," and "transit" rates, have given birth to vague, ill-considered proposals, some of which would be certain to injure the cause which their authors have most at heart.

One point is at the outset very clear—the inconsistent nature of many of the charges made against railway companies. Within the last twenty years such complaints have been the subject of three elaborate inquiries before Royal Commissions or Parliamentary Committees¹. Before all of them were submitted proposals completely at variance with each other.

(¹) See Report of Royal Commission, 1867; Report of Joint Select Committee of House of Lords and Commons, 1872; Report of Select Committee, 1881-2.

With equal emphasis railways are now asked to satisfy contradictory demands ; and to a large extent the multifarious charges made against them answer or cancel each other. Many traders demand the very opposite of what is a necessity to others, and of what consumers, naturally anxious to enlarge the field of supply, earnestly desire. Some of the former complain, for example, in language which seems borrowed from mediæval times, that their " geographical " or " natural advantages " are diminished. Other traders blame railway companies for not sufficiently effacing natural disadvantages, and not offering inducements for the development of trade in new districts. Exporters want favourable terms ; importers do the same ; and another class protests against concessions either in favour of exports or imports. It is a remarkable fact that many of the proposals which were most in fashion a few years ago have now been abandoned, and that in Parliament and the Press we now hear chiefly of schemes totally different from those which were formerly supported. Equal mileage rates were once strongly advocated ; and, probably owing to the great success of the Penny Post and to the experiences of the advantages of one uniform rate for all distances, there was a belief in some minds that, with certain modifications, the same principle might be applied to rates for goods. Ingenious schemes were devised for equalizing within certain zones or areas, rates irrespective of distance and other circumstances. There is a fashion in so-called Railway Reform. Such schemes are now little heard of ; they have given place to proposals essentially different, which may in their turn make way for others.

In all the recent discussions of rates much was heard of those who were discontented, but very little of those who,

being satisfied, were silent. Most errors in Political Economy, it has been said, come from not taking into account what is not seen. Especially true is this of the question of railway rates, not the least important problem of Political Economy. Of the trades and interests which are dissatisfied with existing arrangements, people hear and see much. Unfortunately they appear to take little heed of other interests, equally important, which are contented, or comparatively so, which do not send deputations to the Board of Trade, and which changes such as have been from time to time proposed would injure or even go far to ruin.

SECTION II.

THE PRINCIPLE UPON WHICH RATES SHOULD BE BASED.

THE first condition of any useful discussion of railway rates is that *all* interests shall be considered—the interests of all traders, and of all consumers, as well as of railway companies. To every proposal this test—the golden rule—should be applied. How would any projected change affect all concerned? Every one cannot get such rates as he would desire; the utmost which is practicable is to fix them in the manner, on the whole, most suitable to the requirements of the community as a whole; and this will be found in the long run to coincide with the interests of the companies. In consequence of not applying this test, and owing to the fact that persons may freely put forward proposals without explaining what would be the consequences of a general application of their principle, little progress is made in the discussion. A second condition of any profitable consideration of the subject is obvious. To argue about the propriety of this or that rate, the question whether this town or that port is badly treated, or this or that industry is made to pay too much, is of little use without agreement as to the principle upon which rates ought to be framed. There is a third condition no less reasonable. When English railway companies are accused of imposing charges at haphazard, and in an arbitrary fashion, what scientific principle, it may be asked, ought to be followed? There is

no escaping this question—not even if the task of framing or controlling rates were committed, as has sometimes been proposed, to the Board of Trade or the Railway Commissioners. To this question rarely, however, is any answer given. When one is attempted, very seldom is it made with reference to all interests meriting attention.¹ How often do witnesses before Royal Commissions or in Parliamentary inquiries merely deprecate in general language what they object to as personally injurious, or merely claim what would be advantageous for themselves! How often is their proposal of reform merely a thinly veiled plan for securing *protection* against competition for some industry or some town or port! How many proposals as to rates, propounded with facility and confidence in Chambers of Commerce, would prove to be valueless or even objectionable if their authors were always obliged to answer in detail two questions. What would be the effect of the proposals on consumers? How would they affect producers and traders generally?

(¹) Gustav Cohn, the well known German writer on English railways, while advocating many changes, complains of the limited, one-sided knowledge of the subject shown by the chief English critics of railways.—*Die Englische Eisenbahnpolitik* (1883), p. 88 and elsewhere.

SECTION III.

COST OF SERVICE.

ONE favourite proposal, often refuted but constantly renewed, is to base rates on the actual cost of conveyance *plus* a reasonable return on the capital invested. Whether this would benefit the trade of the country we shall by and by consider.

But it is no light presumption against this principle that, though so often proposed, especially by theorists, nowhere has it been carried out. Obviously cost of conveyance bears no relation to value of goods—the mere transit of some descriptions of very valuable goods costs as little as that of low priced articles. It will be generally found that when pressed, the advocates of this theory are not prepared to maintain that for a cwt. of coals and a cwt. of copper the charges should be the same. They shrink from the application of their own principle, recognising, as is the fact, that it is absolutely inconsistent with any classification of goods, such as traders and the Board of Trade have been urging the companies to adopt.

Inconsistent as such a principle is with any kind of classification of goods, and leading to the consequence that a rate might be the same for a bale of cotton as for high priced silks, its effect might be to revolutionize trade. But there is a preliminary difficulty; how is the cost of conveyance to be ascertained with anything like accuracy?

How is the cost of conveying a particular consignment or even the average cost of every kind of traffic to be found? What the transit of full loads of coal in this country, or of grain in America, from point A to point B costs may be approximately found. Allowances may be made for the maintenance of the permanent way, for cost of engine power, and the wages of drivers, guards, &c.; and calculations, more or less accurate, can be made as to the cost of conveyance even over lines of varying gradients. The solution even of this simple form of problem would be difficult. When in cases before the Railway Commissioners it has been attempted to discover the *actual* cost of conveying a particular kind of traffic, the operation has been laborious. The companies interested have been compelled to incur great expense in procuring returns and information, and the result has in general been only approximately accurate. Very complex and difficult is the real problem. A large portion of the traffic of the country is carried in trains which pick up and set down wagons at intermediate stations. In the same truck may be goods of all classes and different quality or bulk for different destinations. One article of great bulk and light weight may be carried in a truck by itself or along with articles of great weight and small bulk. There is a further difficulty in the fact that, while certain fixed expenses remain much the same, no matter what may be the volume of traffic, the movement or operating expenses increase with the traffic. It may be confidently stated that no trustworthy data as to the cost of conveying each consignment or each class of goods in the actual

NOTE.—See illustration of cubical contents in proportion to weight, page 83.

intricacy of business could be obtained. At best only estimates could be roughly arrived at by arbitrarily making allowances and assumptions. Will those who talk about cost of service reveal the formula by which they can accurately calculate the cost of carriage of a particular article carried in the same truck with a dozen others, all coming from different places and destined for different stations over three or four different lines, the cost of two of which has been the same, and the working expenses of which are totally dissimilar? If they have discovered this formula, it remains to be stated how it may be applied.

So serious are the difficulties in the way of ascertaining the facts as to cost of transport, so varied are the circumstances in this country, that it is not surprising that in every instance in which the principle has been brought before a Parliamentary Committee or Royal Commission it has met with the condemnation expressed by the Select Committee of 1872—"it is impracticable."¹

If the use of each wagon were charged for, according to its capacity, the cost of conveyance per truck could, no doubt, be approximately known. Whether such a system is the best for railway companies need not be here considered; certain it is that it is extremely undesirable in the interest of the trader. According to it, he must pay for a five or a ten ton wagon, whether he filled it or not, and whether the merchandise which he sent was silk, bales of cotton, or fruit.

(¹) For attempts to calculate cost of service, see A. Fink on "*Cost of Railway Transportation*," New York (1882); Hadley on "*Railway Transportation*," p. 261; Sax's *Die Eisenbahnen* 1.60 and 2.361; Lardner's *Railway Economy*; and the Italian Parliamentary Inquiry (*Atti della Commissione d'inchiesta sull' Esercizio delle Ferrovie Italiane*) part II., vol. II., 962.

The system of charging so much a wagon instead of so much a ton—*wagenraum tarif*, as it is called—is, to a considerable extent, in force in Germany and Holland. In both these countries, however, it has been found incompatible with the necessities of commerce to abide strictly by this principle. One curious result would be brought about by charging per wagon—there would be a return to practices some forty years ago given up in England as needlessly costly and unsuitable to business. Every customer of a railway does not want a whole truck. He wishes to send ten cwt. of bales or a cask weighing one hundredweight; he could not send his goods if he had to pay for a full truck. To provide for the wants of the great mass of traders and the ordinary requirements of business, intermediaries between the railway companies have sprung up in Germany and Holland. Indeed, the great bulk of the traffic in the latter country is carried by carriers or forwarding agents in full wagon loads. The company is practically only a toll taker. The forwarding agents charge the consignor or consignee of the goods sums over and above the tolls or rates paid to the companies. So far as a large part of the public is concerned, the rates of the companies are, in those countries, mere paper rates. Not being able to take a full wagon, small traders must pay what the forwarding agents demand, or make special terms with them. This is very much the state of things which existed in England before 1844, when the companies were, as a rule, merely owners of the road, locomotives, &c., and when they left to private persons the business of carriers. Those who can recall that time, or who reflect what the results of such a system would be, will scarcely wish for its return; it would be indeed a lamentable

retrogression, injurious alike to the public and the railway companies.¹

(¹) See the unqualified condemnation of the system in the Italian Parliamentary Report already quoted: "The natural system was a system eminently theoretical. To-day all doubt on the subject is removed; this system was tried for five years, and it proved very unsatisfactory." Parte II., Vol. III., p. 954. It is pointed out with truth that the so-called "natural system" is injurious to small industries and small towns.

See also page 18.

SECTION IV.

EQUAL MILEAGE RATES.

ANOTHER proposal which, though always condemned by competent judges, is still, in some form, very often brought forward, is to charge equal mileage rates. ⁽¹⁾ Admitting the impossibility or impropriety of making rates vary according to the cost of conveyance of goods without reference to their value or quality—recognising the expediency of classification in some form—many persons think that it would be well to charge for the same kind of goods the same sum per mile universally. This plan is simple; it has an appearance of being equitable; and, as such, it is attractive. But, on the slightest consideration, it becomes apparent that exceptions which mar this simplicity must be admitted. In fact, no one proposes that this principle should be inflexibly carried out. Far from being really equitable, equal mileage rates would often act most unfairly. Mileage run is only one element out of many in cost of service; and to compel companies to charge the same sum between points equally distant, irrespective of the original cost of constructing the way, the nature of the gradients, the amount and

(1) The late Member for West Wolverhampton, in comparing the rates for Coke between Staveley and Northamptonshire and Staveley and Wolverhampton, practically advocated mileage rates, although, probably, not intending to do so. (See debate on the second reading of the Railway and Canal Traffic Bill, May 6th, 1886.)

regularity of the traffic to and fro, and the extent of back haulage of "empties," would be doing great injustice. Obviously an allowance must be made to cover the cost of specially expensive undertakings, such as the Runcorn, Tay and Forth Bridges, the Solway Viaduct, or the Severn Tunnel. So, too, allowance must be made for steep gradients; manifestly the same paying load cannot be carried over gradients of one in forty as over one in eight hundred. In Germany and Holland an effort has been made to adopt the mileage system; and (subject to exceptions for import, export and transit rates, referred to afterwards) it is assumed to be carried out. But patent facts could not be ignored; in these countries an extra mileage up to 12 kilometres (about $7\frac{1}{2}$ miles) is taken into the calculation of rates for expensive bridges and steep gradients. Speed, too, must be taken into account; as it increases, a more than proportionate increase in engine power is necessary.¹

Equality is here not equity. To all railway companies the result of establishing a system of equal mileage rates would not be the same. Much would depend on the question

(¹) If an engine and tender weighing together 56 tons is capable of drawing a maximum load of 344 forty loaded wagons weighing 560 tons at 25 miles per hour on the level, it will only take the following loads over the gradients named below, and, in addition to the reduction in the load, the speed would also be considerably reduced.

Level.		40 wagons weighing 560 tons.					
Incline	1	in	100	20	"	"	250 "
"	1	"	50	10	"	"	140 "
"	1	"	30	6	"	"	84 "

See also Spon's Dictionary of Engineering; Encyclopedia Britannica "Railways," and the elaborate work *Des Pentes Economiques en Chemins*, par M. Charles de Freycinet.

whether the rates were the same over all parts of the same railway, or whether equal mileage rates were in force throughout the country: a distinction not always borne in mind by those who propose such rates. Undoubtedly to many railways the loss of traffic as the result of equal mileage rates would be serious. Unless a very low scale of rates, entailing heavy and unnecessary loss, were adopted, much of the long distance traffic would cease to be carried. On other railways, however, the present net revenue might be maintained by levelling up rates; although the amount of traffic would be less, the working expenses might be reduced. On the whole, the more the theory of equal mileage rates is studied, the clearer it becomes that its adoption would probably be much less injurious to some railway companies than to colliery proprietors, manufacturers, traders, ports, and to the country at large.¹

(¹) Before Mr. Cardwell's Committee (23rd February, 1853) the late Mr. Robert Stephenson, the eminent engineer, gave the following illustration, which is not yet antiquated:—

“I referred to that in order to shew the Committee the great
 “impropriety of attempting anything like an equal mileage rate on
 “railways. I can elucidate that in a very remarkable manner, and shew
 “the injustice that the carrying out of the principle would inflict upon
 “some railway companies, especially where goods are concerned. I
 “will take the case of the Great North of England Railway, from
 “Newcastle coal-field towards York, and towards the rivers Tees and
 “Tyne. In one direction there were 5,450,000 tons of coals carried
 “over one mile, which was equal to 320,588 over one mile for each
 “engine; there having been employed by the York, Newcastle and
 “Berwick Company for the performance of that duty 17 engines.
 “Towards York, where the distance was greater, and the gradients
 “were better, and the loads heavier, and the work more uniform, 13

To consumers, whose interests are so apt to be lost sight of in the controversy, the change would be disastrous. Equal mileage rates would seriously lessen or even destroy traffic now conveyed long distances. By narrowing the area of supply, they would raise the prices of provisions and commodities such as milk, fish, and vegetables in and near great towns. The sustenance of a community such as London, is, one might almost say, possible only because it is not fed solely from the region immediately round it, but is supplied from very distant points. If the London markets are able to procure fish from remote parts of Scotland or Ireland, beef from Aberdeenshire and adjacent counties, milk from farms within 100 miles, vegetables from Penzance, and the Channel Islands, eggs and butter from Normandy, coals from the Midlands, Lancashire and South Wales, the capital owes these advantages to the fact that English railways have not been bound by equal mileage rates. Were such a system strictly enforced, fuel, provisions, and most of the necessities of life would be raised in price. So far as consumers are concerned, equal mileage freights by sea—the height of absurdity in the eyes of all who know any—

“engines took 14,435,000 tons over one mile, which was equal to
 “1,110,000 tons for each engine over a mile; in the other case, the
 “duty that one engine performed was carrying 320,588 tons over a mile;
 “therefore in this case one engine has done 3·466 more work than the
 “other engine, so that on the first line it cost the Company nearly four
 “times as much as it cost them for doing the same duty on the other
 “line. On the one line there are a number of collieries; the engines
 “have to stop and pick up the traffic, and the railway wagons do not
 “average perhaps more than seven or eight miles per day, whereas in
 “the other case they work for hours continuously, and with heavier
 “loads and no stoppages.”

thing of commerce—would be as reasonable as equal mileage rates by land.¹

To manufacturers whose works and premises are not near densely populated districts or ports—the great centres of consumption or export—the change would be disastrous. They would be driven out of the field by more favourably situated competitors, who would acquire a monopoly. The pursuit of certain trades would become impossible in districts in which they are now carried on with success. Not a few manufactories would soon be closed, but for the facilities which they now possess for procuring raw materials from remote parts. To give a few illustrations out of many: South Staffordshire is supplied with iron ore or pig-iron from Staveley in Derbyshire, Westbury in Wiltshire, Fawler in Oxfordshire, Frodingham in Lincolnshire, Ulverstone and Wigan in Lancashire, Middlesborough in Yorkshire, and also from South Wales; and it receives limestone from Froghall in North Staffordshire, Minera in Denbighshire, Wirksworth in Derbyshire, Presteign in Radnorshire, and Porthywaen in Shropshire.² Such are examples of the

(¹) See preface to Smiles' *Life of Stephenson*, and, as to the provisioning of Paris by means of railways, interesting details in *La Transformation Des Moyens de Transport, par Alfred de Foville, Chef de Bureau au Ministère des Finances*, p. 256.

(²) About thirty years ago, when the iron works at Westbury in Wiltshire were constructed, it was anticipated that fuel would be obtained from the Radstock district, about 14 miles distant. But after sinking collieries it was found that the coke was not suitable; so that it has now to be obtained from South Wales, a distance of about 130 miles. The pig iron is sent to South Wales in the return coke wagons, and also to South Staffordshire, a distance of 140 miles. The coke and pig iron are carried at special low rates below those in force for traffic to intermediate places. Without such special rates, or if mileage rates were charged, the works would have to be closed.

interdependence of districts and industries, the co-operation of places far apart, with which equal mileage rates would interfere. Even if originally they would have been beneficial they would revolutionise the conditions under which trade has been carried on in this country since the introduction of railways.¹

(¹) An American writer points out that the following would be the result of applying the principle of equal mileage rates, or of basing rates on cost of service :—

1. "There would be little or no classification of freights. Grain, "lumber, coal, iron, shoes, dry goods, groceries, drugs and "chemicals, would all have to pay near about the same rate per "100 pounds per mile, and that rate would have to be something "like an average of the present rates charged upon the different "classes of freight. The higher classes of freight would be a "good deal lowered, and the lower classes would be materially "raised. The result would be that cheap and heavy products "could be no longer transported over the distances that are now "carried.
2. "The rates on through freight would have to be proportioned very "nearly to the distance hauled. The rate from Chicago to Boston "for instance, would be materially higher, and the rate from "Chicago to Baltimore materially lower than the rates from "Chicago to New York.
3. "Roads having the lowest grades, and most favourable alignment "would have lower rates than their competitors, and would "monopolise the business, to the entire exclusion of those lines "which traverse more difficult and expensive territory, and upon "which the cost of transportation was greater. And the tide "once turned, the evil would multiply itself; for the rates would "decrease rapidly on the favoured roads, with the increase of "business, and would increase on the unfortunately located roads, "with the decrease in volume of their freight, until the latter "would be left with nothing but their local business to support "them, which would then have to be advanced to the highest "figures possible."—*Railroad Transportation*, by E. P. Alexander, *Vice-President of the Louisville and Nashville Railway Company*.

Some advocates of the theory of mileage rates may concede that their adoption would entail loss on certain districts and to some individuals, but deny that the community as a whole would suffer.¹ Is this a reasonable view? Even if the home trade were not injured, the result of equal mileage rates must be to increase the cost of production of many articles manufactured at a distance from ports of shipment. Would not this make competition with foreign countries more difficult than it is? And must it not reduce the demand for labour?

The principle of equal mileage rates, it may be added, has been condemned by every Royal Commission and Parliamentary Committee which has investigated the subject; and this condemnation has been pronounced on grounds for the most part wholly independent of the interests of railway companies. As pointed out by the Select Committee of 1872, the principle would "prevent railway companies from making perfectly fair arrangements for carrying at a lower rate than usual goods brought in large and constant quantities, or for carrying for long distances at a lower rate than for short distances."

"It would prevent railway companies from lowering their fares and rates so as to compete with traffic by sea, by canal, or by a shorter or otherwise cheaper railway, and would thus deprive the public of the benefit of competition, and the company of a legitimate source of profit."

(¹) Very recently the fishermen in the North of Scotland have been asking that the same gross rates shall be charged from Wick to large towns in the South as are charged from the fishing ports, such as Grimsby, on the East Coast of England. What would they, or most consumers of fish, say to equal mileage rates?

“It would compel a company to carry for the same rate over a line which has been very expensive in construction or which from gradients or otherwise is very expensive in working, at the same rate at which it carries over less expensive lines.”

The Committee add—“It will be found that the supporters of equal mileage, when pressed, often really mean, not that the rates they themselves pay are too high, but that the rates which others pay are too low.” In other words, they desire to apply the principle when it works in their favour, and to reject it when it does not.¹

(¹) “We have nothing to do here with the study of the tariff systems adopted on the Alsace-Lorraine lines, and extended with some modifications to the generality of German lines. Seductive by its simplicity, the principle of fixing the rate according to the weight only, and without regard to the value of the object carried, has not found numerous partisans in France. Such a radical reform would overthrow our commercial habits, and would occasion results, in a financial point of view, which would be impossible for us to estimate.” Report of the French Commission of the Third System on Railway Tariffs, by M. Richard Waddington. (Appendix 31 to Report from the Select Committee on Railways (Rates and Fares), 1881-2, Vol. 11. p. 449).

SECTION V.

DIFFERENTIAL RATES.

WHILE shrinking from advocating equal mileage rates, many persons take up an intermediate position. They object to rates being much out of proportion to distance; they do so although the traffic may not be carried over the same parts or sections of a railway. The rates to which objection is taken are of several kinds:—Special rates for export traffic; special rates for import traffic; transit or through rates; special rates generally—special rates for long distance as distinguished from short distance or intermediate traffic.

Such differential rates exist—and the circumstance is not unimportant—in all countries in which railways have been developed; and it will be found that, here as elsewhere, they have been adopted, not solely or even chiefly with a view to benefit railway companies, but mainly to meet the not unreasonable demands of traders and consumers.

The following are a few instances of special import and export rates charged by the railway companies in this country, viz. :—

From	To	Article.	Import and Export Rates per Ton.	Local Rates per Ton.
Manchester ..	London	Cotton Goods in Bales	25/- C. & D.	40/- C. & D.
„ ..	Southampton ..	„ „	25/- C. & D.	45/- C. & D.
Birmingham ..	London	Hardware	25/- C. & D.	27/6 C. & D.
„ ..	„	Bedsteads	22/6 C. & D.	28/4 C. & D.
London	Plymouth ..	Newspapers and Periodicals	21/2 C. & D.	37/6 C. & D.
Leeds	Hull	Woollen and Worsted Goods	12/6 C. & D.	16/8 C. & D.
Manchester ..	„	Bale goods	17/6 C. & D.	31/8 C. & D.
Liverpool ..	„	Salt Provisions.. ..	12/6 Carted in	20/- Hull.
„ ..	London	Fresh Meat	25/- <i>a</i> C. & D.	50/- <i>a</i> C. & D.
			30/- <i>b</i> C. & D.	55/- <i>b</i> C. & D.
Bristol	„	American Provisions	20/- C. & D.	27/6 <i>X</i> C. & D.
„ ..	„	Fresh Meat	20/- <i>a</i> C. & D.	} 40/- C. & D.
			25/- <i>b</i> C. & D.	
Hull	„	Meat and other Im- ported Goods	25/- C. & D.	40/- C. & D.

a. Exclusive of hampers.

b. Inclusive of hampers.

X Bacon in 1 ton lots 22/6 per ton C. & D.

Butter and Lard in 4 ton lots 22/6 per ton C. & D.

C. & D. In other words, collected and delivered.

In the interest of shippers transit rates have been adopted; and as an illustration, may be mentioned the rate for tea from China, Japan, and India, brought by water to London, and despatched to Liverpool by rail for shipment to America or elsewhere, viz. :—

From	To	Article.	Export rate per Ton.	Local rate per Ton.
London ..	Liverpool ..	Tea from China, India, Japan, under Bond	25/- C. & D.	37/6 C. & D.
„	Birmingham.	Tea	—	34/2 C. & D.
„	Manchester..	„	—	40/0 C. & D.

In the abolition of these rates the home trader or consumer can have no direct interest; although the transit rate is lower than that for home traffic, it cannot in any way prejudice the English trader. If the special rate were withdrawn he would be no better off; the traffic would simply go to its destination by water.

To reduced export rates the objections are few. They are generally admitted to be useful; and at a time when on all hands it is urged to be necessary to extend our trade abroad, they could not be abolished without causing serious loss and loud complaints. It is important to enable a colliery owner to export coal, or a manufacturer without a port in the vicinity of his works, to export his wares on such terms that he will not be at a heavy disadvantage or be driven out of the field. Special lower rates enable the manufacturers of exported goods, such as manufactured cottons from Manchester, and hardware from Birmingham, to

send them to London, and to avail themselves of lines of steamers sailing from several ports. But for such facilities exporters would be confined to one, and that the nearest, port, and they would lose the benefit of the competition in facilities and sea freights. The railway company which happened to own the route to the nearest port would possess a monopoly of the traffic, and might charge their full rates instead of the present reduced rates.

Nor is the practice recently introduced in the interest of railway companies. In the Act authorising the very first railway on which steam was used, the Stockton and Darlington, the principle is recognised. The tolls upon the coal shipped on board any vessel for export were fixed at one halfpenny per ton per mile, while the toll on all other coal was 4d. per ton per mile. Each of the special export rates has been made, it may be truly said, at the instance of some manufacturer or shipper who would be injured by their withdrawal. In granting such terms, railway companies have endeavoured to satisfy the urgent demands of customers. And if the rate to one intermediate place is fair and reasonable in itself, is it any substantial grievance that it is higher than the rate on goods for shipment?¹

Special import rates have been much more attacked; but when the principle is fairly carried out, they are no less defensible than export rates. Most of the objections to them come, it will be found, from persons who believe that they have a vested interest in certain produce and trades; often they are assailed by the very persons who are the defenders of reduced

(¹) The rate for the carriage of flour from Minneapolis for consumption at Milwaukee or Chicago is one-third higher than the rate for flour for shipment.

export rates. The majority of special import rates naturally arise out of sea competition. The existence of the import rates for fresh meat and provisions from Liverpool and Bristol to London, which have been especially condemned, is due, not, as is assumed, to the arbitrary action of companies, but to the demands and necessities of traders. Those who are interested in the trade of Liverpool, the great seat of the American trade, and in the steamers sailing between America and Liverpool, desire to compete with the direct sea communication with London, or with other ports near to it. In like manner the shipping companies and others who are interested in the trade of Southampton claim special rates and facilities in favour of that port. Naturally they wish that a part of the traffic should go *via* Southampton; and a compliance with their wish benefits the public.

Special import rates are not charged on foreign goods merely because they are foreign; the chief, though not the only, explanation of their existence, is the desire of steamboat companies and merchants that a part of the goods consumed in other places may be carried through the port in which they are interested, instead of the goods being all sent through ports nearer to or direct to the ultimate destination. The railways have, in fact, complied with urgent local demands.

Some rates for import traffic are less than for the same description of goods going in the opposite direction. Such cases are probably rare, and the circumstances of all of them are not fully known. The following, however, was the origin of one of them: The millers in the Eastern counties found that their trade suffered by reason of the competition of millers situated on the Thames, who were able to obtain by water

foreign grain at low rates. The former urged upon the railway companies the necessity of granting them reduced rates from London for foreign grain to mix with English wheat, and thus enable them to produce better and stronger flour than that produced by home grown wheat alone. The millers pointed out that by so doing the local industries in which the companies and the districts have an interest would be benefited, and that there would be an increased trade in foreign grain down from London and in flour up to it. Admitting the force of these arguments, the railway companies put in force lower rates. Here, as elsewhere, we find a collision of interests, and conflicting demands. These rates have recently been altered with the view of partially removing the grounds of complaint in this case; it remains, however, an apt illustration of the difficulties encountered in framing rates. Reduced rates are complained of by one portion of the public; and yet, if they were cancelled, other sections would consider themselves aggrieved. Such are the difficulties with which railway companies have to contend; bound to serve and accommodate classes at variance with each other; subject to criticism and complaint if they do not satisfy contradictory demands.

There has been much hostile comment on the conveyance at reduced rates of foreign produce and merchandise from the Continent, through English ports to places of consumption. The French traffic from Cherbourg or Havre carried *viâ* Weymouth or Southampton, and from Boulogne or Calais, *viâ* Dover or Folkestone, and the Dutch and Belgian traffic from Rotterdam or Antwerp, *viâ* Harwich, have been especially the subject of unfriendly remark. But the explanation of such rates is simple; they are due to no

designs against the English farmer. French traffic carried *viâ* Cherbourg may be sent direct by sea to London. In order that it may be conveyed over a portion of their systems, the London and South Western Company run steamers between that port and Southampton; and until recently the Great Western Company had a line of steamers between Cherbourg and Weymouth. In order to compete with the sea communication, the South Western and Great Western Companies necessarily fixed their rates with reference to the sea freights from Cherbourg and other ports. The distance between Southampton and London is 76 miles, while the distance between Weymouth and London is 159 miles. Of course the Great Western Company charged the same rates by the longer as the South Western Company charged by the shorter railway route. Hence the complaint that French goods were being carried cheaper from Cherbourg to London than from places in Dorsetshire, past which, when carried by the Great Western Company, they were conveyed. The obvious answer was, that if the Great Western Company did not carry at all, the traffic would be sent *viâ* Southampton, and that if the London and South Western Company ceased to carry, it would be sent to London direct by sea. In fact, the Great Western Company have recently given up the steamboat service, and ceased to carry *viâ* Weymouth; the grounds of complaint made in the name of the Dorsetshire farmers have thereby been removed. But the competition, such as it is, of French with English produce, continues all the same, only all the traffic is carried, not through Dorsetshire, but by other routes. Indeed, immediately after the service *viâ* Weymouth was withdrawn a new service was established between Paimbœuf and

Newhaven; and by this route a portion of the traffic previously sent *viâ* Weymouth is now carried.

Irish produce from Waterford is carried to London by various routes: direct to the latter by sea; by sea to Bristol, and thence by rail, 119 miles to London; by sea to Milford, and thence by rail, 282 miles; and by sea to Liverpool, and thence by rail 201 miles. The rates *viâ* Bristol are, and must be, fixed with reference to those charged by sea, and those *viâ* Milford and *viâ* Liverpool, must be the same, or nearly so, as those charged *viâ* Bristol. Yet, according to the views of some persons, this competition is unfair to intermediate towns between Milford and London, and between Liverpool and London, between which intermediate places and London the rates are higher, or higher in proportion, than those charged between London and Waterford. There are complaints as to this disparity, although the competition, if any exists, would continue, even if no Irish traffic were carried *viâ* Milford at all.

Similar observations apply to traffic between Dublin and Liverpool. Between these cities there is daily steam communication; so that goods carried by sea to Holyhead, and thence by rail, may be conveyed throughout at lower rates than those charged for traffic for places intermediate between Liverpool and Holyhead. Indeed, sea competition influences the rates for traffic between Dublin and Manchester. Traffic is carried by sea, *viâ* Liverpool, and thence by rail (31 miles) to Manchester, while the distance by rail from the latter place to Holyhead is 122 miles. Consequently the rates between Manchester and Dublin, *viâ* Holyhead, are less than to some intermediate places.¹

(¹) In the evidence given before the Select Committee in 1831, the

Tea imported into London may be carried by sea direct to Newcastle or Liverpool. Iron manufactured at Middlesboro' or in South Wales can be conveyed by water at low freights to London. So, too, tin-plates may be conveyed by water from Glamorganshire to Liverpool. If the importer or the manufacturer, therefore, desires to send, or the companies desire to carry, any of those goods by railway, special rates yielding only a small profit to the companies must be quoted; otherwise the whole, or nearly the whole of such articles, would be sent by sea. Such reduced rates are complained of because of their being less in gross or per mile than those for the same or similar articles carried for the like or less distances. But grocers or consumers of tea, iron merchants or blacksmiths in inland towns, or manufacturers whose works are

rates for foreign hops from Boulogne to London were compared with the rates charged for home grown hops from the Ashford and Canterbury districts to London. The former were complained of as being an undue preference in favour of foreign produce. No doubt there was a considerable difference. The rate from Boulogne to London was 17s. 6d., and that from Ashford to London, 38s. It was, however, shewn that the rate of 17s. 6d. per ton for foreign hops from Boulogne to London was a station to station rate, while the rate of 38s. per ton from Ashford to London included delivery and all station services, and that owing to the difference in the mode of packing the hops, 73 per cent. more foreign hops than English hops could be loaded in a truck. The railway companies concerned urged that the home producer was not prejudiced by the transit rate complained of. While it enabled the railway companies to obtain the conveyance of a portion of the foreign hops, an increase of the rate from Boulogne would not be of any benefit to the English grower. The foreign hops would still find their way to London direct by sea. The rate of 17s. 6d. per ton from Boulogne to London was cancelled in deference to the complaints. What is the result? The foreign hops are imported as before; but they are now carried by the General Steam Navigation Company. The railway companies have to some extent suffered; the English producer has gained nothing.

near the port of shipment would derive no advantage from all these goods being carried by sea at the same or even lower rates than those now charged by railway. The influence of the sea, "the great free trader" as it has been called, is vast and far reaching. England and Scotland being an island, there is all round the coast direct competition with the sea. It exists for instance between London and Yarmouth, Hull Newcastle-on-Tyne, Leith, Aberdeen on the eastern coast; and between London, Southampton and Plymouth, and the west coast ports, that is, Bristol, the South Wales ports, Liverpool and Glasgow.

If railways in England did not compete with transport by the sea they would in many cases be of comparatively little use to manufacturers and merchants. Only by such competition do they fully minister to the requirements of the trade of the country. If all the intermediate rates were to be brought down to the level of those charged between port and port what would be the result? The companies would have to raise their port to port rates. The public would lose the benefit of rail carriage for goods sent between port and port, and the companies the profit they might have derived from such goods. Who would be the gainer?¹

(¹) Lines of steamers carrying Belgian, Dutch, German, and French goods and produce, run between Antwerp, Rotterdam, Amsterdam, Boulogne, Havre and London. In competition with them the Great Eastern, South Eastern, and London Chatham and Dover Companies carry *via* Harwich, Folkestone and Dover respectively, at such rates as they can obtain in competition with those charged by steamer direct. It has been a subject of complaint that these goods are conveyed at lower rates than similar merchandise from places in Essex or Kent, past which they are carried by rail. No doubt the regular and quick services provided by the

Many apparent anomalies in railway rates arise from competition of the railways with the sea: others are the results of comparisons of the rates charged by railway companies, which must carry, if they are to carry the traffic at all, at the same rates as a company having a shorter route. Inasmuch as competition between railway companies is carried on extensively, many such disparities exist. The apparent anomaly in tin plates being carried from South Wales to Liverpool *via* Stockport, near Manchester, at lower rates than to Manchester, was referred to by Mr. Johnson Ferguson in the debate on the second reading of the Railway and Canal Traffic Bill. This arises from the Midland Railway Company competing with two shorter routes between these places, and from the rates by those routes being so fixed as to meet the competition by sea; the former company's longer route is through Stockport (not Manchester), to which latter place of course there is no export trade, and at which there is no sea competition. This anomaly would be entirely removed by the Midland Company ceasing to compete for the Liverpool traffic; but the consumers of tin plates in Manchester would not in any respect be benefited by the change. The distance by the shortest railway route between London and Bristol is about 119 miles. There are two other railway routes, the shorter

railway companies are of great advantage to the senders and consumers. But so far as London is concerned, a great part, if not the whole of the goods, not requiring quick transit could be sent by sea direct, if the Harwich, Dover, and other services were discontinued.

There are import rates to towns in the interior to which there is no direct sea competition. If such rates are not based on the rates to places to which there is such competition, *plus* the local rates, they may be open to question to an extent not applicable to the rates to and from ports.

of which is 161 miles; there is also direct transport by sea; and by all of these routes there is competition for the conveyance of merchandise traffic. To suit the requirements of the trade between these ports, as well as to contend with competition by water, special rates are charged. Withdraw them, and either the interchange would not take place or the goods would have to be sent by sea. Of course the other railway companies carrying between the two places charge the same rates as those in force by the shortest railway route, otherwise they would obtain no share of the traffic; and these rates are necessarily less for the throughout distance than those charged for like descriptions of goods to some of the intermediate towns on the longer route.

To take one more illustration: steamboats ply between Liverpool and Bristol. Goods carried by railway between these two places by one or other of the three available routes must pass through some one of the following places:—Birmingham, Worcester, Hereford, Shrewsbury, Chester or Warrington. The local rates to all these intermediate towns may appear disproportionate to those charged between the extreme points. But is there any real injustice done? Is it disadvantageous to the public that railway companies should compete with sea carriage between different ports in the Kingdom? Should not railway companies be allowed to accept in respect of traffic so carried, which would otherwise be wholly lost to them, a less percentage of profit without being compelled to reduce all their rates to intermediate inland places to the same or proportionately less amounts? What injustice is done to those whose goods are carried to and from intermediate inland places by the fact that their rates are higher, or higher in proportion, than the

competitive rates, provided the rates to intermediate places are in themselves fair and within the Company's legal maximum?

A third source of complaint of disproportionate rates arises from the competition between ports. Assume, for instance, port A to be 51 miles, port B 72 miles, and port C a greater distance from D, one of the great seats of manufacture and commerce. The merchants and shipowners at C and B desire to compete with A, and they induce the railway company to carry from all three at the same rates. The result is that the rates are lower for the throughout distance than to and from some of the intermediate places. The grounds of grievance would be removed by the railway company ceasing to carry from C and B at the same rates as from A. But the importation of foreign goods would continue; the only difference being that they would be carried through one port instead of two or more. And here a curious fact may be noted. If, in the case supposed, the railways between A and D, B and D, and C and D belonged to separate companies, in all probability no complaint would be made of the rates from A, B, and C to D being the same. On the contrary, competition being always desired by the public, it would be considered in that case advantageous and in the interest of the public. But because the lines between B and D and C and D belong to the same company as that between A and D complaints are made on account of the rates being equal. What is hailed in the one case as a benefit is decried in the other as mischievous and unjust.⁽¹⁾

⁽¹⁾ Many of the rates from Hull are affected by inland water competition, or by those charged from Liverpool. On the other hand, the rates from Hull govern those from Grimsby (as a competing port), Harwich, West

The chief explanations of differential rates have been mentioned ; another cause less important is in operation. In carriage by road, cost may be roughly measured by distance, though even as to the expenses of cartage that is subject to exceptions. But this test—admitted to be practically useless as regards freight by sea—does not hold good of railway transport. Of the various kinds of outlay on the part of a railway company, a large portion remains fixed, whether the distance run by a train is ten miles or one hundred. Such, for example, are the cost of terminal accommodation, and the services of loading and unloading, and clerical work. Such, too, speaking broadly, are the interest on cost of construction, repairs of bridges and earthworks, the permanent staff of employés, and of signalling. Another kind of expenditure increases directly with the mileage run ; for example, the provision of, and wear and tear of locomotives, rolling stock and permanent way, and liability for loss of or damage to goods in transit. Certain kinds of expenditure increase with the distance run, but not in the same ratio. Obviously wages, cost of locomotive power, and cost of haulage generally are not four times as much in the case of a train which has run a hundred miles as in one which has run twenty-five. With the progress of railways, with improved economy in the use of machinery, and in other ways, this tendency—recognised to some extent by the Legislature in the rates for short distance traffic—in expenditure not to increase in the same

Hartlepool, Newcastle, Sunderland and Shields. In fact, a large portion of the anomalies in railway rates arise from the competition between ports. Although improvements in detail as to such rates, no doubt, are possible, the interests of some ports would be seriously affected by any change in the principle on which railway rates are fixed.

proportion as mileage distance, becomes an important element. The result of all this is to make mileage less a criterion of cost, and tends to place large towns at a greater distance at an advantage as compared with intermediate towns, and to give rise to differential rates.⁽¹⁾ It is also obvious that from many intermediate towns the quantities forwarded are not so large and regular as from terminal towns, and that from the former there is not a constant traffic to and fro.

The urgent demands of traders and producers have created differential rates; the interests of the public and consumers have maintained them; interests, it may be added, which have been little heard in any of the inquiries which have taken place, but which, if any change were meditated, would probably be found to have more at stake than the railway companies. They would ask,—Why should such special rates be withdrawn? They would be losers by the change. The railway companies also would be losers. So too would the public interested, especially as regards perishable goods, in the more rapid and regular conveyance of merchandise than is possible by water. Who would be the gainer? Not, certainly, the home producer, who would find foreign goods brought direct to London by sea; not the consumer, who wishes cheap goods rapidly conveyed, and to whom it is immaterial how they reach him. The fact is that differential rates have arisen in no small degree out of the same causes as have necessitated a classification of goods. Goods of small intrinsic value will not be conveyed at all unless at low rates; only on special terms can such goods produced at a great distance be brought to market.

(1) See as to this Dr. Otto Michaelis's *Differenzialtarife der Eisenbahnen*, in which the natural and necessary rise of differential rates in Germany is explained.

Sometimes it is urged as an objection to differential rates, that by reason of them companies sustain, on long distance traffic, a loss which is made up by charges on short distance traffic. Repeated, as if it were an axiom, this statement is generally erroneous; though producing, no doubt, a lower percentage of profits than the latter, the former yields some profit, unless where undue competition operates.

To carry traffic at a rate yielding a small profit, is better for a railway company than to have its permanent way for many hours unused, and its plant not fully employed. It may be expedient to accept traffic producing only a small percentage of profit, if it can be got on no better terms; such traffic will at least help to defray the fixed charges, which must be incurred whether it is carried or not. But is a company bound to do all its business on such terms, or would it be desirable that it should do so? Can the senders of other traffic paying only reasonable rates, yielding the company what would otherwise be admitted to be only a fair profit, justly object? and if a company be deprived of this long distance traffic, will it not be forced to raise rates on other traffic in order to maintain its revenue?

But, it is also objected, differential rates deprive the inhabitants of certain towns of the natural advantages of their geographical position. This argument would be more persuasive than it is if it were not generally expressed in the very language of Protectionists, if it were not so often a claim of an exclusive right to supply certain markets, and a scarcely concealed dislike to the intrusion of competition. Even supposing that low rates, which enable the produce of remote parts

of England and Scotland to be conveyed throughout the length and breadth of the land may interfere with the trade of manufacturers nearer London and other great towns; so may the making of a railway. Places which have one, or districts which are left without any, may be injured by railway communication elsewhere being opened. The existence of any such right as is claimed is questionable. Preserving the natural advantages of one town means preventing the removal of the natural disadvantages of others. In truth, the abolition of differential rates would deprive many places of their natural advantages. That Liverpool is on the sea, and that Birmingham is not, that there is sea communication from the former to London, are circumstances which railways did not create, and to which they must accommodate themselves. Railway Companies are not answerable for the fact that certain kinds of traffic come from a point having the advantage of a sea route; that there is competition at one place and not at another; and that goods may be conveyed from New York to London all the way by sea, or partly by sea and partly by land.

If the rates for all traffic between intermediate places were either made the same as or less than those to terminal points, companies would be compelled to consider whether raising the export and import rates, or reducing those on local traffic, would result in the least loss. If the former course were adopted, as, in the majority of cases it would be, the facilities which manufacturers and merchants now enjoy would be withdrawn; it would be to their interest to ship at the nearest port. The railways would suffer some loss. The inhabitants of intermediate places and the port towns would derive no advantage

except the removal of what generally is merely a sentimental grievance. What would a London draper gain if the Manchester and London Shipping rate were withdrawn, and if manufacturers shipped all their goods in Liverpool instead of a portion of them being shipped from London? What would it avail an Essex farmer if Dutch and Belgian produce were sent direct from Rotterdam and Antwerp to London, instead of through Harwich? Would farmers in the South of England be any better off if French eggs and butter were sent by sea to London instead of through Southampton or Newhaven?

SECTION VI.

GROUPING HERE AND ON THE CONTINENT.

"GROUPING," is the name of the familiar arrangement by which collieries or works within a given area are charged equal rates, and are thus enabled to compete on equal terms. In fixing the rates for traffic carried long distances, grouping stations far apart is carried out to some extent. For instance, the rates for tin plates from South Wales and Monmouthshire to Liverpool are the same from the works between Carmarthen on the west, and Monmouth on the east, the distances varying from 160 to 206 miles. So, too, the rates between Scotland and places in England, south of and inclusive of Yorkshire, are divided into groups—22 in the former, and 39 in the latter. Though the practice is not of the first importance to railway companies, it is not without value to them. If "grouping" were prohibited, and the nearest collieries or works could supply all the coal or goods which were required, railway companies might, in some cases, earn as much net profit on the traffic carried as if grouping were adopted. No doubt, however, if the nearest collieries or works charged the public enhanced prices, or if they could not supply the commodities to the extent required by the public, the railway companies would suffer. They would lose not only the traffic which they

might have carried, but they would also suffer from the lessened prosperity of districts in which they had an indirect as well as a direct interest.

The chief sufferers, however, from the giving up of "grouping" would be the public; they distinctly gain by the practice, though producers near great towns or sea-ports may lose the benefit of "geographical position." Collieries and works which are "grouped" are enabled to contribute to the available supply. They enter markets from which they would be otherwise shut out; the extent of the trade is thereby increased; the price paid by the consumer may be lessened. In fact, many traders admit, tacitly at least, the value of the practice.

Its legality has lately been called in question. It has been supposed to be prohibited by the decision of the Railway Commissioners in the case of the *Denaby Main Colliery Company v. Manchester, Sheffield, and Lincolnshire Railway Company*, which came before them in January, 1880. The complaint was that the rates and tolls charged to the owners of the Denaby Main Colliery, for the conveyance of coal, both by railway and canal were an undue prejudice and disadvantage to themselves and undue preference to the others within the meaning of Section 2 of the Railway and Canal Traffic Act, 1854. The railway rates from the Denaby Main Colliery to Keadby, which is 25 miles, and to Grimsby, which is 56 miles, were 2s. 1½d. and 3s. 1d. per ton respectively. Similar rates were charged from the other collieries in the same group, although the distances between Keadby and Grimsby and the Denaby Main Colliery were 15 miles less than the most distant of the other collieries in the group. For all coal passing to

certain places to the eastward, the Denaby Main Colliery was grouped with 48 other collieries in the same district. But, except in certain cases, the collieries were not grouped for coal going to the west; on traffic sent to places in that direction Denaby had to pay according to its geographical position. With regard to some portion of their traffic to the west, the Denaby Main Colliery had special rates. The decision of the Railway Commissioners, which has not been reversed, was that this particular grouping system did subject the proprietors of the Denaby Main Colliery to undue and unreasonable prejudice and disadvantage. But their decision was probably upon the facts, not upon the law; and their finding really was that the group was too large, and that the Denaby Main Colliery ought to be taken out of it. The same question was to some extent discussed in the House of Lords in the *Denaby Main Colliery Company Limited v. Manchester, Sheffield and Lincolnshire Railway Company* (L.R. 11, A.C. p. 97); and the observations of the learned law lords do not confirm the opinion that grouping is *per se* illegal. (1) If the contrary were the case—if all such arrangements were necessarily illegal—the result would be somewhat serious to trade.

A few particulars as to grouping on the Continent may be mentioned. It will be found that it has been adopted there for the same reasons as led to it here.

In Germany and Holland grouping is recognised. There, as has been previously mentioned, mileage rates is

(1) "I think that even if it were distinctly found that the differences in the charges actually made were so disproportioned to the differences in the cost as to be undue and unreasonable, it would not impose an obligation to charge equally."—Lord Blackburn, p. 122.

the principle on which the tariffs are based, and the State practically controls the rates. But some exceptional tariffs for coal and coke are not calculated upon the distance from the place of origin to the station of destination. Sending stations in certain cases, and sea-ports in others, are formed into groups. In Germany, for instance, the sending stations included in the exceptional tariff with Bremen, Hamburg, and other ports in the North of Germany, are divided into seven groups. The first three embrace all the stations in the Right Rhenish district where coal mines exist. Group 1 contains about fifteen stations from 6 to 24 kilometres distant from each other, in a total distance of 245 kilometres to Bremen and 359 kilometres to Hamburg. Group 2 contains about thirty-five stations from 1 to 19 kilometres distant, and Group 3 seven stations at distances varying from 1 to 13 kilometres. The total distances to Bremen and Hamburg are 271 and 385 kilometres respectively. For all stations in the same group there is one tariff, which is for one fixed consignment per week :—

Group 1	...	...	49 marks per ton.
„ 2	...	...	50 „ „
„ 3	...	...	51 „ „

If there are two fixed consignments sent regularly every week for one year, a reduction is made of one mark for every 10 tons, and for

3 Consignments weekly a reduction of 2 marks for every 10 tons.

4	„	„	„	3	„	„
5	„	„	„	4	„	„
6	„	„	„	5	„	„

The coal stations of the Rhine Province and Westphalia are also grouped for Dutch, Belgian and French traffic. In the two last cases, however, the differences of distance are very slight. For Dutch traffic the differences of distance between the stations in Group 1 vary from 1 to 16 kilometres in a total distance of 218 kilometres, in Group 2 from 3 to 20 in a total distance of 233 kilometres, and in Group 3 from 1 to 33 in 265 kilometres.

The grouping of the ports in the North of Germany, shows a much greater difference in favour of certain ports. For instance, the same rates are charged from the coal stations to Bremen as to Hamburg, although the former is 114 kilometres (71 miles) further; the distance from Dortmund to Bremen being 237 kilometres (147 miles), and to Hamburg 351 kilometres (218 miles.) The same rates are also charged to the following ports as to Bremen, which is distant from the various coal stations from 221 to 271 kilometres:—

	Kilometres.	Milos.
Bremerhafen	66	41 beyond Bremen.
Geestemünde	62	38½ „ „
Harburg	103	64 „ „
Hittfeld	94	58 „ „
Nordenhamm.	40	25 „ „

Thus the “grouping” which is permitted, and indeed actually carried out, by the German authorities, exceeds in degree anything of the kind known on the railways in this country.

In France also, “grouping” of ports is sanctioned with a view to promote competition. The special import and export rates from Dunkirk, Calais, and Boulogne to Paris,

which are equal in amount, notwithstanding the differences in distance, may be taken as an example:—

Dunkirk to Paris, 304 Kilometres.

Calais ,, ,, 296 ,,

Boulogne,, ,, 252 ,,

SECTION VII.

DIFFERENTIAL RATES ON THE CONTINENT.

IN France, Belgium, and Germany, there are fewer ports competing with railways or with each other than in Great Britain. In each of those countries the principle of mileage rates has been nominally, and, to a large extent, in practice adopted. But in all of them causes similar to those which have here created so-called differential rates have been in operation. In each of them the fact of competition by water is recognised as a reason for charging reduced or special rates; such rates for export or import traffic exist, although the special rates for the latter traffic are fewer than for the former; and there are also special transit rates ⁽¹⁾. All these rates have been established after much consideration. Writing of the discussion of the subject in the Corps Legislatif in 1863, M. Aucoc observes in his well-known work, "Since that solemn discussion, the principle of differential tariffs has been placed beyond question." He adds: "It may be well to mention also that, in the numerous judicial works on the working of railways, not only the legality, but the necessity and equity of conditional and differential rates have been almost unanimously recognised."⁽²⁾

(¹) See *décret* of April 26, 1862, quoted by M. A. de Foville in *La Transformation des moyens de Transport* p. 68.

(²) The following are some of the opinions of French statesmen and economists on the subject:—

Take first the special rates in France. Wheat may be imported either *viâ* Marseilles, or *viâ* Rouen and the Seine to Paris, the distance from Marseilles being 863 kilometres, and from Rouen 134 kilometres. To compete with the sea and the Rouen route, the Paris, Lyons, and Mediterranean Railway Company charges for imported goods, special rates between Marseilles and Paris. These rates have been complained of as encouraging foreign trade. The answer, however, is that if not conveyed *viâ* Marseilles such goods might be conveyed *viâ* Rouen and the Seine to Paris. The general tariff rates on the French lines are based upon a uniform charge per kilometre, irrespective of any special requirements of the locality. In order, however, to remedy the

" Dans ma conviction le tarif différentiel est à la fois juste, conforme aux véritables intérêts économiques et nécessaires à la concurrence." M. LOUHER.

" Les industries de transport par eau, par terre ou par chemin de fer ne vivent et ne prospèrent que par les tarifs différentiels. C'est en différenciant sagement leurs tarifs qu'elles attirent les marchandises et les voyageurs." M. LEGRAND, sous-secrétaire d'état au Ministère des travaux publics :

*" L'expérience a démontré aux compagnies la nécessité de superposer au tarif réglementaire de nombreux tarifs à prix réduits.*** Il a été reconnu que ceux là mêmes qui se plaignaient, le plus vivement des tarifs différentiels en recueillaient indirectement le bénéfice. Ce sont, en effet, ces tarifs qui fournissent au trafic des grandes compagnies les masses de marchandises les plus considérables, et ce sont ces masses qui rendent possible la réduction, au profit de tous, des tarifs généraux." M. DE FOVILLÉ. La Transformation des moyens de Transport pp. 66, 67.*

In a report to the French Chamber of Deputies by a Railway Commission in 1880, the Commissioners approved of special tariffs, and added : " We are even inclined to suggest the development of traffic of this nature, the importance of which is not at all in proportion to the natural advantages which France derives from her geographical position and her numerous ports." Appendix 31 to Report from the Select Committee on Railways (*Rates and Fares*), 1882, Vol. II.

disadvantages arising from such a system, and to meet the various circumstances and requirements of particular trades, numerous special tariffs are adopted with the sanction of the Minister of Public Works. These special rates are not, as is sometimes supposed, fixed upon any regular or uniform basis. Some are adopted for the purpose of developing a new, or increasing an existing trade which may be subjected to competition from other districts; others are established to meet competition by sea, canal, or otherwise. Under some circumstances reduced rates are arrived at by adopting computed instead of actual distances; the former being sometimes based on the distance by a shorter route either by rail, road or sea. But in some cases an arbitrary distance is adopted.

The French railway companies have special import and export rates for numerous articles in their classifications which are lower than the ordinary class rates to the port town, and occasionally lower than the class rates from intermediate stations; in which case the special import and export rates may apply. The following table is a comparison of a few import and export rates with the ordinary class rates. The latter, it should be observed, are, in some instances, based on computed, and not on actual, distances.

DUNKIRK AND PARIS.

			ACTUAL DISTANCE, 304 KILOMETRES. COMPUTED DISTANCE, 267 KILOMETRES.					
CLASSES	...	...	1	2	3	4	5	6
			f. c.	f. c.	f. c.	f. c.	f. c.	f. c.
Ordinary Class Rates	...		42·55	36·55	31·20	25·85	20·50	12·35
Import and Export Rates ¹			30·00	26·00	23·00	20·00	{ 18·00 15·00	12·00

CALAIS AND PARIS.

		ACTUAL DISTANCE, 296 KILOMETRES. COMPUTED DISTANCE, 267 KILOMETRES.						
CLASSES	1	2	3	4	5	6
			f. c.	f. c.	f. c.	f. c.	f. c.	f. c.
Ordinary Class Rates	...		42·55	36·55	31·20	25·85	20·50	12·35
Import and Export Rates			30·00	26·00	23·00	20·00	{ 18·00 15·00	12·00

BOULOGNE AND PARIS.

			ACTUAL DISTANCE, 252 KILOMETRES. COMPUTED DISTANCE, 252 KILOMETRES.					
CLASSES	...	...	1	2	3	4	5	6
			f. c.	f. c.	f. c.	f. c.	f. c.	f. c.
Ordinary Class Rates	...		40·30	34·75	29·75	24·65	19·60	11·80
Import and Export Rates			30·00	26·00	23·00	20·00	{ 18·00 15·00	12·00

(¹) Until recently, the classification of imported and exported goods, in force on the Northern of France Railway, was composed of six classes. A new tariff is now in force, the rates for such traffic varying from frs 8 to frs. 30 per 1000 kilogrammes.

For the purpose of comparison, the rates charged for imported and exported goods are shewn under the respective classes in which the same articles are generally included when charged at the ordinary class rates.

DIEPPE AND PARIS.

CLASSES	ACTUAL DISTANCE, 166 KILOMETRES. COMPUTED DISTANCE, 166 KILOMETRES.					
	1	2	3	4	5	6
	f. c.	f. c.	f. c.	f. c.	f. c.	f. c.
Ordinary Class Rates ...	28·05	24·75	21·40	18·10	14·80	9·80
Import and Export Rates	25·00	19·00	14·50	{ 10 75 10·00	9·00	7·00

In some instances the special rates apply both ways, *i.e.*, for import or export goods. But many of the export rates for certain articles are lower than the import rates; for instance, the rate for Cereals from Paris to Dieppe for export is frs. 7·50, while the import rate from Dieppe to Paris is frs. 9.

In addition to special rates for export and import goods there are also special tariffs for *transit* goods subject to special conditions which appear anomalous, and have given rise to complaints. The following is an illustration:— Both Roubaix and Rouen are spinning centres, and Epinal is a weaving centre. The rate for a 5-ton load of Yarn from

Kilometres. fr. cts.

Roubaix to Epinal 462 is 47·60.

Rouen to „ 537 „ 57·40.

Antwerp to „ 467 „ 27·0.

The rate for Yarn from Dieppe to Bâle, a distance of 716 Kilometres, is 47 frs. 30 cts. The explanation of these apparent anomalies is that the rates from Roubaix and Rouen to Epinal are based on the local ordinary tariffs; that the rate from Antwerp to Epinal is a special import rate; whereas the rate from Dieppe to Bâle is a still lower special tariff for transit

goods. The following is an example of transit or through rates from a town in Italy to a port in France. The proportions of the receipts accruing to each Company and the rates charged for goods carried locally between the respective points are shown. It will be seen that the local rates from the frontier to Paris are in excess of the charges from Milan to Paris.

From.	To.	Distance in Kilometres.	A.		B.		Ordinary Local Rates between the respective points.	
			Through Rates for lots of 100 kilos and above		Through Rates for lots of 5 tons and above			
			In the proportions due to each distance.					
			1st class.	2nd class.	1st class.	2nd class.	1st class.	2nd class.
Milan	Modane...	238	f. c. 22.14	f. c. 18.42	f. c. 22.14	f. c. 18.42	f. c. 40.89	f. c. 36.03
Modane	Frontier	12	1.15	0.95	1.15	0.95	2.90	2.50
Frontier...	Paris ...	672	68.10	57.25	53.50	46.55	94.20	81.00
		922	91.39	76.62	76.79	65.92		
Ceinture Railway	—	15	3.10	3.10	3.10	3.10	3.10	3.10
Paris	Havre ...	226	23.05	19.60	17.55	15.35	32.00	28.00
Terminal charges	—	...	...	...	...	...	1.90	1.90
Totals per 1,000	Kilos ...	1163	117.54	99.32	97.44	84.37	174.99	152.53

A.—The proportions accruing to the French Companies for lots under 5 tons remain the same for traffic from all the Italian stations named in the Tariff.

B.—The French Railway proportions for lots of 5 tons and above vary according to the distance of the Italian town from the frontier, as will be seen from the examples below :—

Goods from			Goods from		
Cormons to Havre.	1st class.	2nd class.	Oulx to Havre.	1st class.	2nd class.
P.L.M.	38.60	35.25	P.L.M.	72.75	62.40
Ouest	8.45	7.80	Ouest.....	15.05	13.05

In respect of traffic for intermediate places, the French railway companies may make higher charges than the rates for *transit* traffic carried over the same portion of railway beyond those places. But they may be required to charge the same sums for traffic to or from any intermediate place as they charge for import or for export traffic carried beyond.

In Belgium, also, differential rates are charged between certain places for export and for local consumption. The following are a few illustrations :—

	From	To	FOR EXPORT	FOR LOCAL USE.
			10 ton lots. per ton.	10 ton lots. per ton.
Coal	Mons ...	Antwerp ...	Frs. 2·91	4·62
	Jemappes ...	„ ...	3·04	4·67
	Charleroi ...	„ ...	2·81	4·58
	Fontaine l' Evêque ..	„ ...	2·81	4·58
Bar Iron and Girders	Liège ...	„ ...	4·70	6·65
	Charleroi ...	„ ...	4·57	6·39
	Marchienne .	„ ...	4·54	6·33
			per 1000	kilogrammes.
Window Glass ...	Charleroi ...	„ ...	6·30	8·28

Neither private companies nor the State railways are permitted to make concessions of any kind, or to depart from the official tariff in favour of any particular firm or carrier. All general or special tariffs must be approved by the Minister, and published in the official paper, the “*Moniteur*.”

On the Prussian railways the maximum rates shewn in the tariff are actually charged. But exceptions are made where trade requirements, competition, and other similar circumstances appear to necessitate a departure from the official rates. It is not considered that railway companies are, in general, bound to adjust anomalies in the carriage charged for traffic arising in different districts, for one and the same destination, by reducing the rates from the more distant sending station. But for the sake of uniformity the rates are so adjusted if, for any reason, exceptional rates from any particular district have been adopted, and if they are lower than from intermediate stations nearer by rail to the same destination.

In Germany under the "*Seehafen Ausnahme Tarif*," there are a very considerable number of special rates. For instance, the rate for grain from Bremen to Cologne, a distance of 324 kilometres, is 12 marks, while from Hemelingen, which is short of Bremen by six kilometres, to Cologne (318 kilometres) it is 15 marks 50 pfenning. For the purpose of stimulating the traffic from the Rheinisch Westfälischen District with the German North Sea Ports, viz., Emden, Leer, Papenburg, Bremen, Bremerhaven, the competition of the rates to the Dutch ports, to which the Rhine affords a cheap water conveyance, had to be taken into consideration. Accordingly from Essen to Bremen, 254 kilometres, the Amsterdam rates, which are lower than the tariff rates from Dortmund to Bremen, 237 kilometres, were adopted, although the traffic from Essen to Bremen has to pass *via* Dortmund, which is 17 kilometres nearer to destination. In another instance the German State railways give a rebate of 5 marks per truckload for coal exported from

Hamburg.—“For consignments of coal for Hamburg and Harburg a *rebate* of 5 marks per 10,000 kilos. is made when proof is given that the coal is destined for export to Trannaine, places outside of Germany or for the German “Baltic Ports.” In other words, a rate of 5 marks less is charged to Hamburg for coal for export than to the same place for coal to be consumed in the town.

Exceptional Tariff No. 2 consists of special rates for goods traffic between stations of the Royal Elizabeth Railway, &c., and Gustavsburg. They, however, are only in force during the period when vessels can ply on the Rhine, for instance :—For “Stückgut” or piece goods from Vienna to Gustavsburg the transit rate is 7m. 24pf. per 100 kilos. 1st class, and 6m. 60pf. 2nd class, and the local rates are 8m 11pf. 1st class, and 7m. 73pf. 2nd class.

The effect of these special rates is to secure the traffic to the Bavarian State and Hessian railways, and prevent its passing over the Prussian and Dutch railways. The Rheinisch Westfälischen private railways grant contract (Abonnements Special Train) tariffs for the conveyance of coal from the Ruhr district to Nederlandish stations in fixed consignments of at least 200 tons, and not exceeding 300 tons. The adoption of these rates has principally been prompted by the competition of the water service on the Rhine. They include haulage to the sidings or dépôts ; and they are granted only to traders who contract to send at least once a week for one year a consignment of from 200 to 300 tons to Nederlandish stations.

Thus it will be seen that in Germany the carriage of traffic in large quantities is charged at special or reduced rates. A similar principle has been recognised in this

country also. It was held by the Court of Common Pleas, in the case of *Nicholson v. Gt. Western*, that "Clause 31 of the Railway and Canal Traffic Act, 17 and 18 Vic., is not contravened by a railway company agreeing to carry at a lower rate, in consideration of a guarantee of large quantities and full loads at regular periods provided that the real object of the railway company be to obtain thereby a greater remunerative profit by the diminished cost of carriage, although the effect may be to exclude from the lower rate those persons who cannot give such a guarantee." The effect of such a system, however, has been complained of by smaller traders as favouring the larger ones; and in this country, it is not in practice generally acted upon.

The basis of through tariffs between Germany and other foreign countries is the normal mileage rate to the German frontier; but with the view of encouraging the export trades, reduced rates are charged in favour of international traffic.

The Dutch are also desirous of developing their transit traffic; and with that object so called "exceptional rates," based upon lower mileage rates than the ordinary tariffs, are charged from places of production in Germany to the Dutch ports. Thus, there are "exceptional rates" for, amongst other things, heavy iron and steel goods from manufacturing towns in Westphalia to Amsterdam and Rotterdam, and they are as much as 37 per cent. lower than the ordinary rates. These German-Dutch rates are invariably lower than the ordinary rates to inland towns lying between the forwarding station and the port. The following are some of the exceptional rates in force, compared with the ordinary rates to inland towns for shorter distances:—

From	To	Description of Goods.	In lots of	Distance in kilometres.	Rate per 1000 kilogrammes
					Marks.
Dortmund ...	Amsterdam ...	Heavy iron and steelgoods, bars, sheets, rails ...	10 tons	231	6·30
„ ...	Rotterdam ...			246	6·60
„ ...	Utrecht ...			194	8· 0
Essen ...	Amsterdam ...	Hardware ...	10 tons	199	8·20
„ ...	Rotterdam ...			214	8·70
„ ...	Utrecht ...			162	8·50
„ ...	Gouda ...			194	9·90
Rotterdam ...	Düsseldorf ...	Coffee, rice, currants & sugar	10 tons	234	9·20
Utrecht ...	„ ...			182	10·60
Strasbourg...	Rotterdam ...	Machinery ...	5 tons	614	24·90
„ ...	Utrecht ...			571	25·60
Mannheim ...	Rotterdam ...	Grain ..	10 tons	499	18·40
„ ...	Amsterdam ...			504	18·40
„ ...	Buxtel ...			408	19·40
„ ...	Eindhoven ...			388	18·60
Frankfort ...	Rotterdam ...	Skins ...	10 tons	479	20·
„ ...	Arnheim ...			376	23·80
„ ...	Ede ...			392	24·70
Nuremberg...	Flushing ...	Toys ...	5 tons	715	31·84
„ ...	Arnheim ...			606	42·60
„ ...	Helmund ...			579	40·80

For traffic between Austrian and Hungarian towns and the Dutch ports in certain articles there are also so-called "Seaport transit rates." For instance, for dried plums, apples and peaches, as from Vienna to Rotterdam, the export rate for lots of 10 tons is m. 41·50 per ton of 1,000 kilogrammes, the local rate being m. 51·60 per ton; for wool from Buda Pest to Amsterdam the rate per ton of 1,000

(1) These rates are exclusive of cartage and of the extra charges referred to in appendix I. Page vii.

kilogrammes in lots of 5 tons, is export m. 67·0, local m. 81·30. These rates are only available for goods destined for export or import; and, as will be seen, they are considerably lower than the rates for the same description of goods for consumers in the port of shipment. There are also exceptional rates for goods traversing Germany to and from the German seaports and Austria and Hungary. The following is a comparison between the rates from Bremen to a station on the Danube, and the rates from the latter station to a station situated between that station and the sea-port:—

	Distance in Kilom.	Distance in Miles.	Raw Cotton per 100 ks (2 cwt.)	Tobacco. per 100 ks. (2 cwt.)
			Marks.	Marks.
Bremen—Regensburg	683	427	2·46	2·49
Nienburg—Regensburg	616	385	2·88	3·83
Difference in favour of the longer distance	(67)	(42)	0·42	1·34

In Holland no scale of rates is universally chargeable. Each railway company is authorised by the Concession under which the railway was constructed, to charge certain specified rates. But, as in England, the existing rates actually charged are generally lower than the maximum; and the fixing of them may be controlled by the State. By Article 31 of the Dutch Law^{rates} railway companies are required to carry all goods (not^{as} excluded from transport) and passengers at the rates set forth in the published tariffs, and under the conditions determined^{prescribed} by the regulations, without unduly favouring special persons,

Societies, Companies, or other bodies. By the existing law the railway companies are forbidden to make special arrangements for carriage at lower rates than those published in the tariffs, except in the following cases:—

- (a). For the carriage of large quantities ;
- (b). For the carriage of one or more truckloads of goods at stated intervals ;
- (c). For the carriage of goods intended for charitable purposes or for exhibition.

Notice of such exceptions has to be given to the Home Minister. Those reductions must be available for all goods of the same class, to be conveyed on the same line, and under the same conditions ; they must be immediately advertised ; and they remain in force during the existence of the contract.

By the strict letter of the law it is provided that the same rates must, over the whole of the system of the railway, be charged by the company for the like article for the same distance. But, in consequence of the competition by inland navigation for traffic to and from places in Holland, and also by the Rhine, and through Belgium for German traffic, this requirement proved impossible to carry out in practice. The Government have found it necessary to allow the companies to enter into special contracts for the conveyance of goods on such conditions as they might consider it desirable to agree upon. Notice of any special contract must, as before stated, be given to the Minister of Commerce after it is entered into, and the official assent is subject to the company agreeing to enter into a like agreement with any other person. While such is the letter of the law, virtually enjoining equal mileage rates, the practice is altogether different. For any description of traffic, special

The following is an illustration of the special contracts entered into and of the manner in which their existence is notified :—

SPECIAL AGREEMENT for the carriage of slow train goods
from
to
between
on the one hand, and the General Goods Manager of the

Railway Company, at
contracting in the name of the Direction of the the above-named
Company (or Companies), on the other hand.

The first-named contracting party binds himself to have all the goods to be despatched or received by him during the current year, estimated at truck loads (kilogrammes), from
to

carried over the lines of the
Railways, in accordance with the conditions in Article IV. of the Law of Railway
Companies (General Rules and Regulations), of 9th January 1876 (Gazette No. 7), and
with the Special Bye-Laws in force for local traffic, as set forth in the tariff, for the
conveyance of fast and slow goods over the lines of the

Railway Company, approved by order of the Minister of the Interior, dated 1st March, 1877, and which tariff came into force on the 1st April, 1877. On the other hand the last named contracting parties bind themselves to carry the goods of the first-named contracting parties during the year 1885 at the reduced rates shown in the circular of the
Railway Company, dated 1885.

No use may be made of these rates for the re-despatch of goods at intermediate stations, so as to obtain a cheaper rate than the direct rate.

Agreed to and signed in dupl. at

th 188

Contracting party No. 1.

_____th _____ 188

Contracting party No. 2.

[COPY OF CIRCULAR.]

RAILWAY.

The Direction of the
those interested that the General Goods Manager
of
has been authorised to make special agreements for the
carriage during the current year of large quantities of Goods, or for regular consign-
ments of one truck-load or more between Stations of the
Railway, and between those Stations and Stations of the
on the following basis :—

(a) For large quantities :		Per 100 kilos. and 10 km.			
In consignment of 10 tons	...	in	...	...	1 cent.
„ „ 5 to 10 tons	...	...	...	...	1½ cent.
„ „ 3 to 5 tons	...	...	...	...	2 „
„ „ 100 kilos. to 3 tons	...	...	...	...	3½ „

with 8 cents per 100 kilos. terminal charges.

(b) For regular consignments in truckloads ;

The charges as above for consignments of 10 and 5 tons.

Any fractional distances will be counted as for 10 kilometres, and the weight per 100 kilogrammes, without distinction for different classes of goods. Parts of 10 kilometres and 100 kilogrammes will thus be taken as 10 kilometres or 100 kilogrammes.

With these exceptions the General and Special Rules and Regulations of the
Local Rate Book of 1st April, 1877, with the alterations and additions
made therein later, apply to these contract goods.

Consignments of 5,000 kilogrammes will be treated in the same manner as goods
of Class A, and consignments of 10,000 kilogrammes in the same manner as goods
belonging to the Classes B, C, D, and the Special Tariff.

Further information can be obtained at all the Stations ; or on application to the
Agent of the

Railway.

[COPIES OF NOTICES OF SPECIAL CONTRACTS.]

From the "*Dutch Guide*," of 28th January, 1886.

HOLLAND RAILWAY COMPANY.

A contract has been entered into for the carriage of a large quantity of goods over
the Company's lines.

Further information can be obtained at the Goods Office, at the Central Adminis-
tration Buildings, Droogbak, Amsterdam.

AMSTERDAM, 25th Jan., 1886.

The ADMINISTRATOR.

From the "*Dutch Guide*," of 25th February, 1886.

COMPANY FOR WORKING THE DUTCH STATE RAILWAYS.

Various contracts have been entered into for the carriage of large quantities of
goods on the Southern net of the State Railways.

Further information can be obtained at the Goods Manager's Office, Moreelselaan,
No. 1, Utrecht.

UTRECHT, 17th-24th Feb., 1886.

The GENERAL MANAGER.

CENTRAL RAILWAY.

A Contract for the carriage of cattle has been entered into. Further information
can be obtained at the Goods Manager's Office, Catharijne Kade 759, Utrecht.

The result is that a considerable portion of the traffic is carried under special agreements, under conditions such as the following, viz. :—

The sender agrees to forward between A and B special quantities, for instance :—

80 tons Soap,
10 „ Sugar,
5 „ Pepper,
5 „ Tobacco,

or to forward the whole of his traffic between C and D estimated at a specific quantity for a certain period, for instance :—

400 tons General goods,
10,000 „ Coal,
1,000 „ Coke.

In Italy, differential rates have been the subject of public inquiry, and the representatives of some local interests have asked for their abolition. But they exist ; and the verdict upon them of the Parliamentary Committee of Inquiry in 1881 was : “ It is indisputable that the system of differential rates has helped to strengthen and improve the national industries.”⁽¹⁾

The fact of railways in other countries charging special rates for import, export and transit traffic, is, of course, not a proof of their being right in principle. But the foregoing information may correct loose assertions or suggestions that differential rates are unknown or rare elsewhere. It shows that the railway authorities and the Governments who control the rates in those countries, even while professing to charge mileage rates, have considered it necessary, with the view of promoting and protecting the interests of their trade, to charge differential rates.

(¹) Parte II., Vol. II., Sec. 32.

In the United States, where there is much competition for the conveyance of long distance interstate traffic, and where remarkably low rates—"war rates," as they are called—are charged, charges for intermediate traffic are not lowered proportionately. In that country differential rates have been much attacked; they have no doubt occasionally been imposed without measure or reason. But they still subsist, and are found useful. As an illustration it may be stated that, at the present time, the rates for the conveyance of flour from Minneapolis to Milwaukee, 335 miles, and to Chicago, 420 miles, are the same; while the rate to Duluth, 164 miles, is only 25 per cent. less.

NOTE.—The *Montreal Gazette*, 1st April, 1896, writes thus on the subject of the Railway Commission Bill:—"These rates are fixed and determined by the "Great American Trunk Lines, in competition with which the Tariff of the "Canadian roads is necessarily regulated; to interfere with these rates would be to "take away from the Canadian Companies a large amount of the gross earnings "derived from a source which increases the volume of business in Canada. . . . "The discrimination which is complained of in particular localities arises wholly out "of an established competition between lines reaching a favoured point. Destroy the "natural consequences and natural advantages of competition—lower rates—and you "remove all inducement to the provision of rival routes; put an end to competition, "and at once an increase in rates all round will be established. The Railway Act "prohibits interference by the Government in the regulation of rates until a Company "is proved to earn 15 per cent. upon its invested capital. What Railway Company in "the Dominion to-day is earning that profit? . . . If competition is to be "made a positive disadvantage, if every inducement to particular localities to promote "rival enterprises is to be swept away, the rates of existing lines will be run up in all "directions to the injury not only of every locality now favoured by competition, but "of those localities which consider themselves aggrieved by reason of the absence of "the low rates which competition enforces."

It may be mentioned that one of the fiercest enemies of differential rates, in a work recently published, declares that the only remedy is to "restore the character of "public highways to the railways by securing to all persons the right to run trains over "their tracks under proper regulation!" "The Railways and the Republic" (1896), p. 372, by James T. Hudson.

SECTION VIII.

THE INTEREST OF CONSUMERS IN RATES.

OF the causes which have prevented progress in the public discussion of rates, chief has been the fact that the subject has been regarded too exclusively from the point of view of a limited number of traders or producers. The general interests of the country have been overlooked, or it has been assumed that they are identical with those of particular traders. Once the question is looked at from several sides—as it appears to those who buy as well as to those who sell, and to producers in different places—many of the complaints made against the companies as to the existing system of fixing rates are seen to be unfounded.

Those who buy commodities are interested in getting them to the various markets cheaply and in abundance. They wish the charge for transport to be small—they wish it to be small even if the distance from which the goods are conveyed be great, because their sources of supply are thereby increased. To the consumer the ideally perfect state of things would be a tariff for the conveyance of merchandise based on the same principle as the Penny Post; commodities would be conveyed at a low price, and producers over an immense area would be able to send them to market. To the consumer it would be in every way desirable that all disadvantages of distance or “geographical advantages” should disappear.

Accordingly, as has been before stated, plans have been brought forward for making uniform rates for the same class of goods within a large area, or within certain regions or zones. The attainment of this is impracticable—the distance between various parts of the same country cannot be ignored, as in the case of carrying letters or transmitting telegrams. Consumers may fairly desire that the cost of transporting articles from a great distance may be lowered so as to permit of the influx of goods from remote parts. But unfortunately they cannot altogether efface distance. The next best thing is that the cost of transport shall not increase *pro rata* with the distance. This reasonable desire railway companies have sought to satisfy, and with what results is well known.

London, for instance, formerly drew its chief supplies of food from its immediate neighbourhoods. The extensive market gardens which existed, especially in the eastern and western suburbs, sent their produce to town by heavy road wagons, and to this day they continue to do so. But as population increased, and the demand for food became greater, the facilities, both in regard to conveyance and charges, afforded by the railway companies, enabled farmers, graziers, and market gardeners in distant parts of the kingdom to compete with those in the immediate neighbourhood of London, to the obvious advantage of the consumer. In this way fat cattle from Norfolk, meat from Scotland and Devonshire, fish from Scotland, Ireland, and the East and West Coast of England, brocoli and new potatoes from the Scilly Islands, Penzance and the Channel Islands, store potatoes from Lincolnshire and Scotland, and other articles of food are conveyed by the railway companies at rates which, although not propor-

tionate to those charged for shorter distances, are beneficial to traders and their customers. Meat is carried from Yorkshire, about 189 miles, at 55s. per ton ; from Aberdeen, 516 miles, at 67s. 6d. ; and from Stromness, in Orkney, 776 miles, at 90s. per ton. Potatoes from Yorkshire are carried at 15s. ; from Sunderland, 269 miles, 18s. 4d. ; and from Aberdeen, 30s. per ton. The effect is to open fresh markets to producers throughout the country, and to supply the wants of an ever increasing population at such reasonable prices as would not otherwise be possible.

“ To move is practically to produce,” at least it often is so. The consumer desires that commodities and materials should be conveyed from places where they are produced cheaply or are abundant, to places where they are more in demand ; that coal, for instance, should go to districts where there is ore without fuel available for smelting ; that timber, or excellent building stone, should be conveyed to great cities ; and that the small value of many raw materials, rendering it impossible for them to bear more than the lowest rate of carriage, should not prevent their being conveyed. This demand, also, the railway companies have satisfied by charging rates not always exactly varying with the distance. Writing of the marvellous effects of railways, the late Mr. Newmarch, in his edition of “ Tooke’s History of Prices,” says : “ Among their greatest achievements are the opening up of new fields of supply, and the deepening of old channels of consumption. They have brought into profitable use mines, forests, quarries, arable and grazing districts, fisheries, harbours, and rivers, previously inaccessible. The produce arising from these various and numerous sources is so much additional wealth placed at the command

of the community.”⁽¹⁾ Had equal mileage rates been universally enforced many of those new sources of supply would still be useless; the articles would not bear the cost of transport.

At any given time in a particular market there is a certain price which an article such as milk, wheat, or iron will fetch. Assuming that price to be 30s., the cost of production 20s., the rate of conveyance 3d. a mile, A, B, C, D, to be four places, each 10 miles distant from each other on the same railway, and each capable of producing an “output” of 500 tons. The article can be economically conveyed no further than $\frac{10 \times 12}{3} = 40$ miles, that is from D. In such circumstances consumers will have an available supply of 2,000 tons. Producers at A, 10 miles distant, will pay for transport 2s. 6d.; those at B, 5s., and so on. Those at A, B, and C, 10, 20, 30 miles distant, will possess a considerable advantage over producers at D, the place 40 miles distant. This superiority would be retained by those who have long leases; but in course of time, by the action of competition, rents would rise, and the advantage would tend to pass to the owners of the land at A, B and C. What would be the result, if a railway company, desirous of enlarging its traffic, established lower rates (say 2d. a mile) to E and F, places on the same line, also 10 miles apart, and equally capable of producing an “output” of 500 tons? The particular article might now be conveyed from F, 60 miles distant. The consumer would benefit; his available supply would now be 3,000 tons. In practice this might be an understatement of

(1) Vol. 5, p. 376.

the gain to him, for the result might be to give access to districts in which the conditions of production were altogether easier and cheaper. Producers at A, B and C, might temporarily—the landowners at these points might permanently—suffer; but the public and other landowners would gain. They would gain indirectly and directly—directly in the increased volume of supply, indirectly by the increase of traffic enabling the company to keep down its general scale

NOTE.—The evidence of Sir Thomas Farrer, given in 1881, is very deserving of consideration. In answer to the question, “Now turning to the question of inequality of charges, of which the Committee have had many complaints—in fact, the bulk of the complaints have been with regard to the inequality of charges from one place to another—in your opinion, is this inequality productive of injury to the trade of the country?” He replies, “As far as I can judge, it is not.” He is asked:—“I suppose you would say that while on the one hand one portion of the country may be a loser, another portion of the country is a gainer, and that the one may be set against the other?”—He answers:—“I am not quite certain that I should say that one portion of the country is a loser, but I am quite certain that another portion is a gainer.”

Again, in reply to question: “Then looking at the question also from the point of view of the public, the inland towns which are charged higher than towns on the sea-coast are merely paying the natural penalty of being inland towns, and not having an equally good geographical position?”—He states, “Quite so; on the whole I should think the inland towns were proportionately better off than before the railways existed, because, before the railways existed, sea-side towns had the water traffic to themselves, but now the railways afford a kind of competition with that traffic, and bring a great many places into communication with one another which could not have been brought into communication before.”

In reply to the question, “On the whole, do you think the country gains by these rival routes to the outports?” He says, “I do distinctly.” And again, in answer to the question, “According to your view, then, as far as the public is concerned, it is of no consequence that a railway company should so destroy the natural advantages of one place?” He replies:—“I should say it is one purpose of the railway companies to annihilate distance as

of charges ; and manufacturers and landowners at points E and F would benefit. Such an illustration may serve to show how the interests of some landowners and certain traders may sometimes be on one side, and those of consumers, other landowners, the bulk of traders, and the railway companies on the other.

far as they can ; I would certainly encourage the railway companies in bringing Shetland fish to the London market, even although the effect of it were to lower the price of the Grimsby fish." Further, in reply to the question, "As far as that is concerned, you would allow the Railway Companies to make any differential charges they may please for or against other localities?" He replies:—"I would certainly not compel them to charge upon fish from Thurso and fish from Grimsby in proportion to the distances of those two places. I have been accustomed, as a free trader, to consider the interest of the consumer very largely; but it seems to me that this claim for regular mileage has proceeded upon the interest of one special class of producers; but it is very much to the interest of the consumer as well as to one class of producers, that the people at a distance should be able to send to the consuming market.

SECTION IX.

THE REAL BASIS OF RATES.

THE Managers of English railways have not assumed that they could fix rates on a "Scientific" or "Natural" basis. But they have endeavoured, after consulting merchants, manufacturers and traders, to fix such rates as were required to develop the largest amount of trade; and it is submitted that they have been carrying out principles which will, on the whole, bear the closest examination. They probably have made mistakes, and in some cases entered into undue competition with each other, or fostered it too much between producers or ports. But the principles upon which they have acted are sound; and the instances in which they have erred are exceptional. It has been the aim of railway companies to make rates conform to the requirements of trade, or, according to a popular expression, to charge what the traffic will bear.¹ It is easy to misrepresent this prin-

(¹) In the Report made by M. Richard Waddington in the name of the Commission of the Third System of Railway Tariffs, special or differential rates are thus referred to. "These Tariffs are established in compliance with a trade demand which varies, as one can easily understand, according to the locality and district concerned. Like intelligent merchants the administrators of the railway companies have based their rate of charges on the law of *Supply and Demand* . . ." The celebrated expression of M. Solacroup, director of the *Orleans Company*, sums up the considerations which led to the compilation of special tariffs. "*In the matter of Transport Tariffs there is only one rational rule, viz., to ask of merchandise all it can pay; any other principle is no principle.*"

ciple. The commonest misrepresentation is to assume that it means charging what the traffic will *not* bear. Rightly understood, this, it is contended, is the only fair working principle; the only scientific rule, if that phrase has any clear meaning. It is only another way of saying that rates should be so fixed as to enable a manufacturer or a trader and the railway company to obtain a reasonable profit, and that rates should ultimately be determined by the law of supply and demand. The value of conveyance, like the value of any other service, is not necessarily what it costs, but what it is worth to him who wishes his goods carried. On supply and demand, the available means of transport and the demand for it depends what it is worth while to give for carrying an article from A to B. Obviously the demand will be affected by the nature of the merchandise. If it be of a costly nature, such as manufactured articles, producers of it or dealers in it can afford to pay a higher rate than if it were of low value; a rate of 3d. a ton per mile, which might be prohibitive of the carriage of sand or lime, would add to the value of silk or velvet only an insignificant percentage. ⁽¹⁾

The capital of English railways amounts to upwards

(1) It may be objected that under such a system companies might extort exorbitant sums from traders who must send their goods. But (1) the figures and returns referred to later on show that in fact the companies have not made such charges, but have benefited every industry as well as themselves; (2) the statutory maxima cannot be exceeded; (3) at many points there is effective sea and canal competition; (4) the result of increasing the rates to a height which prevents the producer from earning a fair profit must, in the long run, be to diminish the traffic of the railway; (5) there is always a liability when high rates exist that Parliament will sanction a new line. even if the chances of its financial success be not great.

of £800,000,000. One of the problems to be considered is how to raise a revenue sufficient to pay on this sum even a moderate rate of interest? The Companies might perhaps obtain it by charging for conveyance according to equal mileage rates or according to cost of service. Following such a course they might probably levy charges which a great portion of the traffic would not bear; they might charge, for example, as much for a consignment of pig iron as for a consignment of copper of equal weight carried equal distances—which is generally what cost of service implies. If their sole object were to obtain the necessary revenue, they might cease to regard the effect of rates upon the interests of traders, districts, or ports, and, while conforming to the statutory maximum, they might levy rates detrimental to particular kinds of traffic. Their practice has been altogether different: they have sought to give full effect to the intention which Parliament had in view in framing the rude statutory classifications. They have endeavoured to suit the charges to the capacity of the traders, and in the words of Section 90 of the Railways Clauses Consolidation Act of 1845, "To accommodate them (the rates) to the circumstances of the traffic." Such is the only sound principle working to the interest alike of railways and their customers. If rates were too high, and the traffic could not bear them, traders would suffer; the companies themselves would also suffer; their traffic would diminish, or would not expand as it might do. Such was the principle, speaking generally, on which the classification in railway Acts was framed. Such, too, is the principle of existing rates, only instead of being an hypothesis as to what will suit particular kinds of traffic, the existing classification and rates are based on facts carefully ascertained, verified by long experience, and corrected from time to time.

It is not unimportant to bear in mind that much the same principle as that which we have discussed is applied in regard to indirect taxation, or the taxation of commodities.⁽¹⁾ What an article will bear—in other words what the owner can with convenience pay—is a rule alike applicable to taxation and railway rates. In more civilised countries articles of prime necessity are not taxed, or very little; articles of luxury and of great value are taxed more. A distinction is made between wheat and tobacco, sugar and wine; and whenever it is practicable, without opening the door to fraud, to put indirect taxes on *ad valorem* basis, it is done. A similar rule is observed, so far as possible, with respect to direct taxation. Income tax, for example, is payable only by those whose incomes exceed £150. An endeavour is made to obtain the revenue of the country from the persons who can best afford to pay, and to levy it upon articles, the taxation of which will, to the least practicable extent, be a burden on the trade of the country. To fix railway rates on any other principle than that described above would be much like raising the national revenue from all persons alike, rich or poor, to impose the Customs and Excise upon all commodities, whether articles of luxury or necessity, and irrespective of their value.

When railways were first authorised, it was everywhere anticipated, strange though it may now appear, that

(1) See Ricardo (Principles of Political Economy and Taxation, 3rd Section, page 144): "Of all commodities none are perhaps so proper for taxation as those which, either by the aid of nature or art, are produced with peculiar facility. Taxes on luxuries have some advantage over taxes on necessities, they are generally paid from income, and therefore do not diminish the productive capital of the country."

See also Leroy Beaulieu, *Science des Finances*, vol. i.

the companies would be merely toll takers, and that the public, or carriers, would use them in the same manner as turnpike roads. Every railway was to be a highway; every one of the King or Queen's subjects was to be free to use it. Many statutes bear traces of this, now apparently, curious assumption. The private Acts, as a rule, contained no provision for the companies themselves acting as carriers. The classification of the articles to be carried and the tolls to be taken were borrowed from the canal Acts. No very clear principle of classification ran through the special Acts. The classification in the main, however, probably accorded with the considerations pointed out by Adam Smith, who drew attention to the inconvenience of levying tolls on turnpike roads solely according to weight. ⁽¹⁾ Speaking broadly, the tolls were in accordance with the ideas as to indirect taxation prevalent at the time when canals began to be largely constructed. In the original classification one may trace a desire to encourage agriculture, and the manufacture of iron, and

(1) "A tax upon carriages in proportion to their weight, though a very equal tax when applied to the sole purpose of repairing the roads is a very unequal one when applied to any other purpose, or to supply the common exigencies of the State. When it is applied to the sole purpose above mentioned, each carriage is supposed to pay exactly for the wear and tear which that carriage occasions of the roads. But when it is applied to any other purpose, each carriage is supposed to pay for more than that wear and tear and contributes to the supply of some other exigency of the State. But as the turnpike toll raises the price of goods in proportion to their weight, and not to their value, it is chiefly paid by the consumers of coarse and bulky, not by those of precious and light, commodities. Whatever exigency of the State, therefore, this tax might be intended to supply, that exigency would be chiefly supplied at the expense of the poor, not of the rich; at the expense of those who are least able to supply it, not of those who are most able."—(*Wealth of Nations*. Book 5 part 3.)

such articles as were, generally speaking, carried in large quantities. Articles of general use in manufactures and raw materials were to be carried cheaply. The omissions from the lists of articles are remarkable. Such commodities as coal, iron ore, bricks, clay, manure, slates, stone, bar and pig iron, heavy iron castings, anvils, chains, timber, grain, flour, sugar, hides, dye-woods, earthenware, drugs, cotton and wool, were enumerated. On the other hand, machinery, hardware, hollow-ware, cutlery, glass, ale, wines and spirits, grease, oils, soap, drysalteries, paints, colours, paper, leather, floor-cloth, and textile fabrics, were not named; they came under the general description of "manufactured goods, articles, matters or things," and might be charged the highest maximum rates. The special Acts contained, as a rule, an enumeration of only 40 to 50 articles in three to five classes.

In a few years, experience proved that the theories on which Parliament had proceeded were impracticable. In the first place, the notion that railways could be used by all comers in much the same way as canals or roads was found to be erroneous. Railway companies accordingly applied, in their special Acts, for powers not only to find locomotive power and wagons, but also to convey traffic as common carriers. In 1845, the Railways Clauses Act (s. 86) authorised every company to convey on their railway all such passengers and goods as might be offered to them for that purpose, and to make such reasonable charges in respect thereof as might be from time to time determined upon, not exceeding the tolls by the special Act authorised to be taken. The special Acts contained, as has been stated, imperfect classifications of merchandise, the maximum rates charge-

able for conveyance, and powers to charge for loading, unloading, and other services incidental to the business of a carrier. About 1845 a second great change in the mode of charging for conveyance came to pass; and it is a circumstance worth noting that about that date a similar change took place, without concert, in France, Belgium and wherever railways existed. Up to that time railways had, as a rule, acted on the principle of equal mileage rates. This proved disadvantageous; it did not meet the requirements of trade; it was particularly unsatisfactory to distant traders; it prevented the opening up of new districts; and it needlessly limited the amount of traffic.

About the time which we have mentioned, the imperfection of the statutory classifications became manifest. Such rates as were intended to be *ad valorem* were not in fact on that basis; so far as it was intended to favour raw produce this object was not sufficiently accomplished. The advantages of differential rates, the necessity of adapting charges to the traffic, the power of railways to open up new districts, and develop new industries, began to be understood. Accordingly the Legislature enacted the following provision, the words of which merit attention: ⁽¹⁾

(1) In the same year a Statute (5 & 9 Vict. c. 28) was passed giving canal companies powers to vary tolls in the same manner as railway companies might. By 8 & 9 Vict. c. 42, which was passed the same session, canal companies were authorised to become carriers on their canals and "to make such reasonable charges for conveying, warehousing, collection and delivery as they might respectively from time to time determine upon, in addition to the several tolls or dues which any such company or undertakers were then authorised to take for the use of the said canals, navigations or railways." Two years later canal companies were authorised to borrow money for the purpose of becoming carriers on their own waterways. (10 & 11 Vict. c. 94.)

S. 90. " And whereas it is expedient that the company
 " should be enabled to vary the tolls upon the railway
 " so as to *accommodate them to the circumstances of the*
 " *traffic*, but that such power of varying should not be
 " used for the purpose of prejudicing or favouring par-
 " ticular parties, or for the purpose of collusively and
 " unfairly creating a monopoly either in the hands of
 " the company or of particular parties, it shall be law-
 " ful, therefore, for the company, subject to the pro-
 " visions and limitations hereinafter and in the special
 " Acts contained, *from time to time to alter or vary the*
 " *tolls by the special Act authorised to be taken, either upon*
 " *the whole or upon any particular portion of the railway*
 " *as they shall think fit* ; provided that all such tolls be
 " at all times charged equally to all persons, and after
 " the same rate, whether per ton, per mile or otherwise,
 " in respect of all passengers, and of all goods or
 " carriages of the same description, and conveyed or
 " propelled by a like carriage or engine passing over
 " the same portion of the line of railway under the same
 " circumstances, and no reduction or advance in any
 " such toll shall be made either directly or indirectly
 " in favour of any particular company or person
 " travelling upon or using the line."

Personal preferences were forbidden. But the companies were to accommodate their rates to the circumstances of the traffic, the Legislature's mode of expressing the rule that the traffic should pay what it could bear ; and within the statutory maxima, the companies were to be free to alter their tolls as they thought fit.

How far this was altered by s. 2 of the " Railway and

Canal Traffic Act, 1854," need not here be considered. It is enough to say here that, so far as s. 90 was concerned, differential rates were not only not prohibited, but distinctly sanctioned. S.90 required equality only in regard to traffic "passing between the same points of departure and arrival, and passing over no other part of the line."⁽¹⁾

For more than forty years railway companies have been conforming to these principles. They have been developing long as well as short distance traffic, and aiding the opening of new industries. They have done so to their own advantage, for though the return on the capital expended on railways has been small, it has been obtained on a large volume of traffic. They have been able to benefit the commerce of the country to a degree which would have been impracticable if, instead of rates being elastic and freely accommodated to traffic, the traffic had been

(¹)—Earl of Selborne in *Denaby Main Colliery Company v. Manchester Sheffield and Lincolnshire Railway Company*.—L.R. 11 A.C. p. 113.

Consumers may profitably bear in mind the report of the Select Committee on Railways (Rates and Fares), of 1881-2. Whilst stating "Your Committee cannot recommend any new legislative interference for the purpose of enforcing upon Railway Companies equality of charge." They add: "Some of the inequalities of charges complained of are to the advantage rather than to the disadvantage of the public, where there is an *undue preference* the law now gives a remedy." They also give the following illustration:—

"That Greenock sugar refiners should be in the same markets as the sugar refiners of London, while it may be a grievance to London refiners, must be an advantage to Greenock refiners, and cannot be a disadvantage to buyers of sugar."

It is added that the effect of interference with the freedom to fix rates according to special circumstances would in this instance be "to give a practical monopoly to the London sugar refiners who would be the real gainers by the transaction. It does not appear to your Committee that such a result would be either just or reasonable."

forced to adapt itself to the rates. Producers pay what they find it worth while to pay; they pay no more. In framing the statutory classification, the Legislature assumed that producers would probably find it worth while to pay the authorised charges. The companies find out what such producers can in fact pay, and what rates will best promote traffic. What preferable rule could be substituted ?

SECTION X.

NEW CLASSIFICATION.

ONE inconvenience incidental to the course taken by the railway companies has been experienced. The actual classification in use does not follow the meagre, and in many respects arbitrary, statutory classifications; the latter may not be a guide to the former. This was one of the grievances laid before the Railway Rates Committee in 1881 and 1882. Traders, it was said, could only with difficulty ascertain the companies' powers to charge for goods not enumerated in their Acts. The representatives of the railways agreed with some of the witnesses who gave evidence on behalf of the traders as to the original classifications in the Acts of the companies having become obsolete. They explained that from time to time they had been rectifying, in the manner already described, the defects of the statutory classification, and that, acting on information communicated by manufacturers and merchants, and guided by their own experience, they had framed and generally adopted the Railway Clearing House Classification, which embraces some 2,700 articles, and which is, on the whole, fairly adapted to the requirements of trade. They added that the companies were prepared to agree to a revised maximum classification in lieu of the original classification.

Accordingly, the Committee recommended—

“ That there should be adopted over the whole Railway system one uniform classification of goods.”

“ That terminal charges should be recognised, but be subject to publication, and, in case of challenge, to sanction by the Railway Commissioners.”

The Board of Trade thereupon intimated to the railway companies their intention of introducing into Parliament a Bill with the view of carrying out some of the recommendations of the Committee, and requested them to prepare a standard maximum classification for general adoption.

This was done. The companies were also prepared to assent to a codification of their maximum rate clauses, having due regard to their existing powers, so as to assimilate them to the new classification. But they stipulated that certain rights which at that time were considered by some to be doubtful—in particular, the right of the companies to charge for terminal services—should, as recommended by the Committee, be recognised. The Bill introduced in the Session of 1883 by the Board of Trade was not proceeded with. Acting therefore on a suggestion which was made to them, several of the companies introduced Bills in the Session 1884-5, with a view to consolidate the maximum rate clauses, and secure the adoption of a general classification, and the recognition of terminals. But the companies received from Government no such assistance as they had reason to expect. The mere consideration of their Bills was strongly opposed, the Board of Trade eventually joining in the opposition; and the measures had to be withdrawn. Last Session the Board of Trade introduced a Bill, not only to compel the companies to do what they, by their Bills introduced in the Session of 1885 sought to do, but also to make it obligatory on them to accept such altered rates and tolls as the Board of Trade, with the sub-

sequent sanction of Parliament, might lay down, and to submit to periodical revisions thereof — requirements so contrary to the conditions on which the companies provided the capital for the construction of the railways, that it is difficult to believe that the effects of the provisions of the Bill could have been clearly understood. The companies unanimously objected to a measure which amounted to confiscation. It is probable that a satisfactory arrangement would have been come to; but owing to the dissolution of Parliament the Bill was not proceeded with. In view of the desire of the public for a new classification, the recommendation of the Railway Rates Committee, and the general assent of the companies, it may be assumed that in the course of the next Session the subject will again be brought forward; and it is therefore desirable to consider the principle on which a classification should be framed.

In the earliest Canal and Railway Acts the basis of the classification was the nature, bulk and value of the articles carried. The lowest tolls were applicable to articles carried in large quantities, such as lime, dung, coals, and rough stone; the medium tolls to grain, timber, &c., and the higher to manufactured goods, and the more valuable articles of merchandise, such as wool, tea, wines and spirits, &c. On canals, this classification was in force, notwithstanding the fact that they were at first only toll takers, and did not incur any cost in conveyance or any risk—services and liabilities for which the carriers charged the public beyond the tolls. The numbers of articles enumerated in the original Acts were, as previously stated, from 50 to 60, divided generally into from three to five classes. The present Railway Clearing House classification, which has been revised from

time to time, contains seven classes. The following is a comparative statement of the number of different articles enumerated in it during the last 34 years :—

1852	...	...	...	748
1860	...	...	...	816
1870	...	...	...	1,621
1880	...	...	...	2,373
1886	...	...	...	2,753

Judging from remarks which have been made ⁽¹⁾ as to the “inconsistency and want of classification,” it appears to be the view of some persons that this classification has been framed by the companies in an arbitrary manner and without regard to the necessities of trade. Nothing could be more erroneous than this assumption. Of necessity it is from the traders themselves that the railway managers have primarily obtained the information by which they have been guided in framing the classification. The questions to be determined in fixing rates are not simple; the elements to be taken into account are many. Whether the traffic is considerable, whether the cubical contents are large or small in proportion to the weight whether it is carried in large or small quantities, whether

(1) “What is complained of by the traders is not so much the high scale of the rates as their inconsistency and want of classification, as well as the want of facilities given by the railway companies for the development of the trade in a particular locality. That before the Royal Commission on Depression of Trade, not a single witness, except in the shipping interest, was examined in reference to railway rates who did not complain of some act of injustice on the part of the railway companies, not so much in regard to the rates, although they were onerous and prohibitory in some cases, as to the inconsistency of such rates.”—*Mr. L. Cohen, House of Commons Debate, 6th May, 1886. Hansard, vol. cccv., pages 428-9.*

the merchandise consists of raw materials or manufactured goods, articles of necessity or luxury, must be considered. The requirements of traders with conflicting interests, the different views taken by the companies, and the desire to encourage special industries must be studied. In practice what takes place is this. When a new article of commerce or of manufacture is introduced, the merchant or manufacturer calls on the railway company immediately interested to have it classified and to fix the rates. Of course, there is an endeavour to get it placed in the lowest possible class. Such applications are carefully considered; and they are from time to time discussed by the managers at their conferences. Thus the classification is continually under consideration and revision; there is a constant process of re-adjustment to the changing circumstances of trade. So-called anomalies there no doubt are, and departures from the basis on which a classification should be framed. But the Railway Clearing House Classification, which is the result of this continual effort to adapt charges to new conditions, answers reasonably, if not perfectly, the requirements of trade.

It must be borne in mind, in framing a new standard classification, that it will be the maximum beyond which the companies must not go. If adopted generally over all railways, the scales of maximum rates must allow scope for the local necessities and peculiarities of different districts of the country. Inverness-shire and Cornwall, as well as Staffordshire, Lancashire, and Yorkshire, agricultural, manufacturing, and mining districts, must all be considered. There must be sufficient elasticity in the scale

NOTE.—The New Zealand correspondent of the "*Economist*" (Oct. 23, 1886), writes from Wellington as follows: "The fact of the railways being

of maximum rates to allow of the charges being remunerative on short distance traffic. Goods coming under the same generic name often vary considerably in cubical contents in proportion to weight, value, and risk of damage, as well as in the extent to which they are carried; all considerations not to be forgotten in constructing a uniform classification. The following few examples, taken casually from consignments actually carried, illustrate the remarkable variations in the weights and bulk of some of the traffic:—

						Cubic feet to the ton.
Agricultural Implements vary from ..						70 to 1316
Boots and Shoes ..	...	...	...	...	...	75 „ 108
Coal ...	...	...	...	...	...	34 „ 48
Copper ...	...	...	...	...	...	10 „ 165
Carpets ...	...	...	...	...	...	68 „ 159
Drain Pipes ...	...	...	...	...	...	99 „ 205
Furniture ...	...	...	...	...	...	142 „ 3501
Hay ...	...	...	...	...	...	364 „ 630
Holloware ...	...	...	...	...	...	106 „ 214
Hats ...	...	...	...	...	...	529 „ 1719
Iron (Bar) ...	...	...	...	...	...	7 „ 39
„ (Scrap) ..	...	...	...	...	...	24 „ 165
Luggage ...	...	...	...	...	...	95 „ 971
Millinery ...	...	...	...	...	...	315 „ 986
Sewing Machines ...	...	...	...	...	...	104 „ 350
Straw... ..	...	...	...	...	...	788 „ 1256
Tobacco ...	...	...	...	...	...	53 „ 165
Wool ...	...	...	...	...	...	266 „ 747
Ditto (Australian pressed)...	...	...	...	...	...	93 „ 282

“ in the hands of Government is by no means an unmixed good. A uniform
 “ system of rates is demanded everywhere. If a concession is made to one
 “ district, the rest of the colony naturally demand to be placed on the same
 “ footing, so that the Railway Department rarely meet the wishes of the
 “ public. *A private Company, if it found that the freight could be got by lower-*
ing the tariff on some particular item, would do so at once, and if it paid,
 “ *continue it.* The cost probably would be merely a few tons of coals, and

The value of goods coming under the same description, and the risk in conveying them, frequently vary as much as the cubical contents. No matter what pains are taken to frame a fair classification, it is to be feared that any classification based on a careful consideration of the nature and value of the articles carried, and all the varying circumstances of trade—and an omission to consider any such element would work injustice—must appear to some traders to be more or less anomalous. Some will still consider they have a grievance to lay before Chambers of Commerce.

It may be well to state how the problem has been dealt with on the Continent. The particulars given may be instructive to those who hastily recommend an adoption of the systems in force abroad.

In France the classification of goods and rates is in a transition state; and a large portion of the trading and manufacturing classes are discontented with the charges at present made by the railway companies. With a view of simplifying the tariff, in 1879 the Minister of Public Works took steps to frame for adoption on all the French Railways a classification divided into six classes. Subsequently an attempt was made to prepare a uniform scale of railway rates diminishing according to distance. But after a long enquiry, and full consideration, the proposal was abandoned. In 1883, the Paris, Lyons, and Mediterranean Railway Company proposed the adoption of a revised tariff, which professes to afford, on the whole, a reduction in the rates as compared with the former tariff. It was sanctioned by the Minister of

"a small amount for wear and tear. *Many trades, notably the timber trade, are very much hampered by the Government tariff which does not admit of differential rates.*"

This is a sample of the inconveniences attending uniformity.

Public Works in August, 1885. It consisted of six classes for general goods in any quantities, and six for goods of the special classes, which are generally carried in lots of one and five tons. The latter six classes were in substitution for the many special tariffs formerly existing. The Eastern of France Railway Company also revised their tariff, re-adjusting the classification, and reducing the number of their special tariffs to 28. An article formerly carried at a special tariff between certain specified stations is now charged at the fourth class rate. But when carried generally, and not between particular stations, such an article remains, as before, in the second class. The Northern of France Railway Company have also revised their tariffs on a somewhat similar basis.

Long debates on the subject of the charges under the new tariffs, and on the railways generally, took place in the Chamber of Deputies, in February and March last. There were complaints that the "reformed tariff," and particularly that of the Paris, Lyons, and Mediterranean Company, had not brought about the anticipated reductions, and that, while in some cases lower rates for certain goods carried in large quantities had been conceded, higher rates had been fixed for similar goods sent in small quantities. The rate for 5 ton lots, for instance, is lower; but that for lots under 5 tons is generally higher. The larger traders had derived a benefit from the change; but the small traders and consumers compared with what they were, are placed at a disadvantage. So far the other companies have not made any alteration in their tariffs.

Thus it will be seen that in France there is no uniform classification. The tariffs of the companies, with the exception of the Ouest, Nord and Est, are composed of a different number of classes, and the number of articles

enumerated in the classification also varies. Articles, too, are not included in the same classes on all lines. For instance, the Ouest enumerates 1686, the Nord 1519, and the Paris, Lyons, and Méditerranée, 1425. The tariffs are divided—

by the Compagnie de l'Ouest into 6 classes.

„ „ „	l'Est	„	6	„
„ „ „	du Nord	„	6	„
„ „ „	Paris, Lyons, Méditerranée	} 6 general tariff classes 6 special „ „		
„ „ „	d'Orleans	„	4	classes.
„ „ „	du Midi	„	5	„
„ „ „	de l'Etat	„	9	„

The following examples show how the classifications vary :—

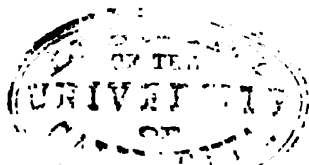
ARTICLE.	Ouest.	Est.	Nord.	Paris-Lyons-Méditerranée.	Orleans.	Midi.	Etat.
	Class.	Class.	Class.	Class.	Class.	Class.	Class.
Ironmongery	4	2	2	2	2	3	2
Colours (common) in Casks	4	1	1	1	3	3	4
Manure	6	6	6	6	4	Spec'l	6
Flour	4	4	4	4	3	3	4
Wool (raw)	4	2	2	3	3	2	2
Machinery (packed) ...	4	3	3	3	1	3	3
China in Casks and Crates	3	1	1	1	2	2	1
Raw Sugar	5	4	4	4	3	3	4
Potatoes in Bags... ..	5	4	4	4	3	3	4
Window Glass	4	3	3	3	2	3	3

In Germany, Holland and Belgium there is no such classification as is in force in this country. Generally speaking, goods of all descriptions, except wagon loads of 5 and 10 tons, are charged according to weight, irrespective of their nature or value. In Germany the railway tariff consists of 8 classes, viz. :—

1. *Grande Vitesse* ... which includes articles of all descriptions carried by passenger train.⁽¹⁾
2. "*Stückgut*," or "Piece" Goods. Which includes articles of all descriptions of less than 5 tons carried by goods train.
- 3A1. Wagon Loads ... Articles of all descriptions in truck loads of 5 tons not mentioned in the special classes.
- 4B. " " Articles of all descriptions in truck loads of 10 tons.
- 5A2. " " Certain articles specified in the classification, in truck loads of 5 tons.
6. Special Tariff, I. }
7. " " II. } Ditto in 10 ton lots.
8. " " III. }

The system actually existing in Germany is a compromise. Previous to 1878 different systems existed in

⁽¹⁾ *Grande Vitesse* goods are not always carried by passenger train. They can be carried by any train the railway company may determine, provided the time allowed by law, which is half the time for ordinary goods, is not exceeded.



North and South Germany. The classification in use in the former was governed by the value of the goods ; while that in force in the latter was framed with particular reference to their weight and measurement. In that year, however, an attempt was made to reconcile the two systems; the "Reform Tariff," as it is called, was established on all the German railways. There was a concession to the Southern system; rates for goods in covered trucks in five or ten ton lots were adopted. The North system, on the other hand, was recognised by establishing the Special tariff classes, in which the relative value of the goods has been taken into consideration. The actual classification is therefore dual; it is a compromise between two totally different systems. Obviously it does not accord with the requirements which have been put forward by, or on behalf of, traders in this country.

In Belgium, also, there is practically no classification except for traffic in full truck loads. The tariff consists of—

Tariff No. 1 ... Articles of all descriptions
up to 5 kilogrammes (11 lbs.)
carried by passenger trains.

Tariff No. 2 ... Articles of all descriptions
carried by ordinary passenger
trains, but chiefly
articles of all descriptions
up to 200 kilogrammes (4
cwt.) carried by goods
trains.

Tariff No 3.— Class I.— Goods of all descriptions from
8 cwt. and upwards, conveyed by goods trains.

Tariff No. 3.—Class II.— { Certain goods specified in
 „ III.— { the classification, in truck
 „ IV.— { loads of 5 tons.
 „ IV.— Certain goods specified in
 the classification in truck
 loads of 10 tons.

For Tariffs 1, 2, and Class I. of tariff No. 3, there is practically no classification. All goods up to the specified weights are included, without reference to their value or nature. Only in respect of the wagon-load classes of tariff No. 3 does any classification exist. In this classification, which applies to all the Belgian railways, about 639 articles are enumerated. It is assumed to be framed with reference to the value of the goods, the mode of transit, the amount of the company's responsibility, and the circumstance of the goods being carried in open or covered trucks.

In Holland, the classification is very similar to that which exists in Germany. Goods are divided into two classes, *i.e.*, "*Stückgut*" or "*Piece*" goods, to which belong all consignments less than 5 tons carried by goods train; and "*Truck Load*" goods, which includes goods in truck loads of 5 or 10 tons, or which pay as for those weights. The "*Stückgut*" class is subdivided into two classes, and the "*Truck Load*" class into four classes. The total number of articles enumerated in the classification is about 242. Although the bases of the tariffs charged for conveyance differ, the classification is practically the same on all the railways in Holland. The following is an example of the classification of goods on the Dutch Rhenish Railway. It will be seen that such articles as coffee, cheese, butter, in consignments of less than 5 tons, are included in the same

class as coal, coke, gravel and raw iron; a feature not likely to be imitated by admirers of the "scientific classification" supposed to exist abroad.

DESCRIPTION OF GOODS.	In Lots of		
	Less than 5 Tons.	5 Tons and above.	10 Tons and above.
Bark, asphalt pipes, petroleum, vinegar, clay drain pipes, oils, paper, trees, butter, fresh meat, coffee, spirits, cheese, hair, dyeing earths, pencils, sugar, sumac	II.	A	
Raw tobacco, pitch, lithographers' stone, cabbage and vegetables in bulk, herrings, window glass, dye-woods, cotton yarn, Glauber-salts, soda, cotton twist, wool, jute	II.	B	
Raw asphalt, ashes, potato meal, beetroot, seeds, sheet iron, iron pipes, iron wire, lime, linseed, cake, lead, parts of machines, pasteboard, corn and grain, raw sugar, iron	II.	C	
Guano, grindstones in the rough, stone troughs, coal tar, worked stones, sleepers, spath mill-stone, fuel, marble in blocks	II.	D	
Raw iron, cast iron, gravel, wood, coal, limestone, pebbles, raw chalk, clay, manure, coal, coke, turf, ore, tiles	II.	D	S R

This diversity of system and practice will give some idea of the difficulty experienced in framing a classification suitable to each country, or, indeed, to various portions of the same country. The difficulty will be still better understood by observing the different manner in which goods placed in the 2nd Class, under the Railway Clearing House Classification, are classified in other countries.

CLASSES.

DESCRIPTION OF GOODS.	ENGLAND.	FRANCE.			BELGIUM.	HOLLAND.	GERMANY.	CANADA.	
		Nord.	Ouest.	P. L. M.				Any Quantity.	Car Loads.
Aerated Waters ..	2	4	5	4	1	Gen. Tariff	Gen. Tariff	3	4
Agricultural Machines ..	„	2	2	2	1	„	„	1, 1½ & D 1	„
„ Seeds ..	„	4	4	4	3	B	S. T. 1	2	5
Bacon and Hams ..	„	2	4	2	1	Gen. Tariff	Gen. Tariff	2	4
Bedsteads ..	„	2	3	2	2	„	S. T. 1	1	„
Biscuits ..	„	1	1	1	1	„	Gen. Tariff	2	4
Cattle Food ..	„	3	3	3	3	B	S. T. 2	3	5
Cheese (Packed) ..	„	2	4	2	1	Gen. Tariff	Gen. Tariff	3	4
Cider in Cases ..	„	2	4	2	1	„	„	3	4
Colours and Paints, Common ..	„	1	4	1	1	„	„	3	5
Confectionery in Casks ..	„	1	1	1	1	„	„	1	4
Flax, Raw ..	„	3	4	3	2	„	S. T. 2	3	5
Hemp, Raw ..	„	3	4	3	2	„	„	3	5
Leather, Undressed ..	„	3	4	3	1	„	Gen. Tariff	3	5
Osiers ..	„	2	4	2	2	B	S. T. 2	2	6
Preserves, Casks ..	„	3	4	3	1	Gen. Tariff	Gen. Tariff	2	4
Cotton Yarn for Weav- ing ..	„	2	2	2	1	„	„	3	5

The following is a comparison of the number of articles included in each classification, so far as such exists, in France, Germany, Holland, and Belgium :—

CLASSES.

ENGLAND.	Mineral.	Special.	First.	Second.	Third.	Fourth.	Fifth.	Chargeable at Mileage, Scale, &c.
Railway Clear- ing House...	80	446	453	500	672	319	180	103
FRANCE.		Sixth.	Fifth.	Fourth.	Third.	Second.	First.	1
Ouest		36	329	533	250	213	326	
P. L. & M.		35	104	231	265	279	511	
Nord		36	106	253	279	288	557	

(1) The first class in France corresponds with the highest or fifth class in England.

CLASSES.

BELGIUM.	Fourth.	Third.	Second.	First.
	168	177	294	Goods of all descriptions in part loads.
HOLLAND.		B.	C.	
		168	84	
GERMANY.	Special Tariff 1.	Special Tariff 2.	Special Tariff 3.	
	314	119	176	

The number of articles which the companies proposed to provide for in the standard classification by their Bills deposited in the Session of 1885, was 2,656, classified as under :—

CLASSES.

Mineral.	Special.	First.	Second.	Third.	Fourth.	Fifth.
86	389	469	483	682	334	213

Assuming that any maximum classification to be framed should comply with the conditions which have been already stated, and that it should accommodate trade in all districts of the country, the classification suggested by the railway companies in their Bills will bear the test of any fair inquiry. When the change which we have indicated is carried out—when the maximum rate clauses of the companies are consolidated and revised on an equitable basis having regard to the present powers and to the new classification—traders will be able easily to ascertain whether the charges made by the companies are within their Parliamentary powers.

SECTION XI.

TERMINAL CHARGES.

WE come to another common complaint against railway companies,—the one which, next to that relating to differential and import rates, has lately been most heard of. From time to time during the last 30 years, and especially of late, the right of railway companies to make charges for what are known as terminal services beyond the remuneration for actual conveyance has been challenged. On the part of the railway companies there has been no change of practice. No new kind of charges has been imposed ; those in dispute have been made from the very beginning of railways in this country. Introduced by the common carriers upon the railways, they were continued by the railway companies. On the strength of the right to receive these charges, companies took upon themselves the carrying business, constructed large goods stations, with vast siding and other accommodation, and in providing land, premises and appliances, expended an enormous amount of capital, not necessary for earning the statutory mileage rates. The legality of such charges has been, after full argument on appeal, upheld by the Court of Queen's Bench (*Hall v. London Brighton and South Coast Railway Company*, L. R. 15 Q. B. D. 505) : their equitable character is not less clear, and the contention to the contrary is, in the words of the joint judgment

of Mr. Justice Wills and Mr. Justice Mathew, "singularly unreasonable."¹

We have already mentioned the anticipation, in the early days, that the railway companies would merely furnish the railway and charge tolls for the use of it by carriers and others, who would employ private locomotives, carriages and wagons. The notion was borrowed from the experience as to canals and highways; and it has been well said that "no proper understanding of a good deal of our railway legislation, and pre-eminently of clauses relating to tolls or charges, can be arrived at, unless it (the theory) is firmly grasped and steadily kept in view."² On railways, as on canals, there were three states of circumstances which it was considered must be provided for: First a railway company, like a canal company, might simply provide a highway, looking to the tolls alone for the use of that highway for a revenue upon their capital; secondly, without themselves being carriers, the railway company might provide trucks and locomotive power, as the canal companies provided boats and haulage power on the canal; or, thirdly, both the canal company and the railway company might be carriers upon the highway which they themselves had provided, and find the wharves, stations, other necessary premises, accommodation and appliances, and the capital for that purpose.

The owners of lands along the banks of canals were entitled to construct, in connection with them, wharves,

(¹) Mr. Justice Manisty delivered a separate Judgment. See note at foot of page 99.

(²) Wills, J., in *Hall v. London Brighton and South Coast Railway Company*, p. 536. See also Field J. in *Brown v. Great Western Railway Company*, L. R. 9 Q. B. D., p. 751.

basins and warehouses ; and we find in the earlier railway Acts, and in the Railways Clauses Consolidation Act 1845 (subject to which all railways since that date have been, constructed), similar powers with respect to railways conferred upon adjoining owners. They were authorised to construct sidings and junctions for the purpose of making communications between their own lands and the railway. It was intended that a trader should load his wagons on his own premises, carry them over the railway and take them off the railway again at another siding or communication, paying the railway company a mere toll for the use of the length of line over which the traffic was in fact worked. Nor was this a mere theory. For many years upon some of the railways in this country the work of carrying merchandise was, to a considerable extent, actually performed by large firms of carriers, such as Pickfords, and others, who provided their own siding accommodation with the railways, and built or rented their own stations and warehouses. During this period the railway companies, so far as this part of their traffic was concerned, merely provided the highways, the wagons and the engine power, and hauled the traffic from its place of origin to its destination ; and they undertook no responsibility as common carriers in respect of the goods. The carriers provided the station accommodation, loaded and unloaded the goods, checked and weighed them, and handed over the loaded or unloaded trucks to the railway company in a convenient position for the engine to be attached to them. Of course, the carriers, who undertook all liability as such, charged the public not only the tolls which they paid to the railway company, but also a considerable additional sum to cover the risk of their Common Law liabilities, the cost of providing station and ware-

house accommodation, clerkage and invoicing of goods, and other services beyond the haulage of the trucks.' Upon some lines the state of things which we have described existed for many years. But gradually the railway companies began to undertake the duties and responsibilities of carriers. They purchased or built, often at enormous expense, the necessary terminal accommodation which, under the previous system, had been provided by private carriers; and they made to the public charges similar to those which the carriers themselves had before made for corresponding accommodation and services. The companies raised the large sums required to furnish this accommodation and for their working capital as carriers, upon the faith that they were entitled to stand in all respects, in the place of the carriers or forwarding agents, and to make reasonable charges for accommodation and services not covered by, and obviously having no relation to, the mileage rates for simple haulage from point to point.

This view has been sanctioned by the Legislature in almost all Railway Acts passed since 1845. The charges which a company are authorised to make are of three kinds—first, tolls for the use of the railway as a highway; secondly, charges, in addition to the tolls, for the use of carriages, wagons, and for locomotive power where such of them are provided by the company—in other words, for conveyance

(¹) Mr. William Pierssene, Manager to Messrs. Pickford & Co., stated in his evidence before the Railway Commissioners in the case of *Kempson v. The G. W. R.* (4 N & M 426), that in addition to the amount of the railway companies' tolls, a sum varying from *twelve to eighteen shillings* a ton was paid by the customer for the services which now form the subject of terminal and cartage charges.

along the railway. A third class of charges becomes due when the company not merely convey the goods, as they would for the carriers who had their own station accommodation and staff, but are themselves the carriers; cases where, in addition to providing the highway, vehicles, and locomotive power, they perform "such services as are incidental to the duty or business of a carrier." These services include the providing of stations, warehouses and sheds, where goods are received, sorted, loaded, covered, checked, weighed, and labelled, and trucks marshalled for convenient removal to their various places of destination, and the maintenance of a large staff of clerks, book-keepers, porters, workmen, engines and horses necessary for these operations. In this last case the company are entitled to make, in addition to the charges proper to highway, rolling stock, and locomotive power, a reasonable charge for the services, often costly and onerous, rendered in their totally different capacity of carriers.

It is undisputed that if the railway companies were not carriers and acted as toll takers only, they would be entitled to claim their full tolls. But what would be the result if they put in force such a right? The carriers or forwarding agents who would replace them, naturally would, as they formerly did, levy such payments as would cover the cost of station accommodation, and all the services performed in respect of the carriage of goods beyond the mere conveyance along the railway. Can it have been in the contemplation of the Legislature that railway companies were not to be entitled to make the same charges?

Suppose a Bill were before Parliament for the construction of a railway, and a clause requiring that

the mileage rates should cover the cost of terminal accommodation were inserted, and the promoters accepted the Bill with such a restriction. The construction of a station at the terminus of the railway in a large town is very costly, and it would be to the interest of the company to make the station outside the town where land and works would be cheap. They would thus save capital upon which they would obtain no return, and, at the same time, they would be entitled to charge the public the full cost of cartage, whatever the amount might be. The Great Western Company, for instance, might have constructed their terminus at Wormwood Scrubs—from which place the cost of cartage to the City would probably be 7s. 6d. per ton, which the public would have to pay. With the view of affording better accommodation and of reducing the expense of cartage, they have erected a station under Smithfield Market, at a cost, in interest on outlay, maintenance, and other terminal expenses of an average of 3s. 8d. per ton. According to the opponents of terminal charges the Great Western Company are only entitled to be paid a mileage rate proportional to the distance from Wormwood Scrubs to Smithfield, that is, as for seven miles, to cover the use of the railway and the station. To take other illustrations, could it be supposed that the London and North Western Railway Company would have spent several millions of capital in providing expensive station accommodation in the immediate vicinity of the Docks in Liverpool, instead of receiving and delivering the traffic at Edge Hill, or that companies would have constructed vast stations in London, Manchester, Leeds, and many other important places, unless the cost was to be covered by pay-

ments in addition to the mileage rates? So inequitable and opposed to the real interests of traders is this contention that it is difficult to understand how it could ever be put forward.

One of the allegations before the Railway Rates Committee in 1881-2, was, that the companies carried some traffic at too low rates, and, to compensate themselves, imposed higher rates than otherwise would be necessary on other traffic. Now, if railway companies were not allowed to charge for terminal accommodation and services, one effect would be that in consequence of the cost of the construction and the expenses of stations, short distance traffic would be actually carried at a loss.

In recent years terminal charges have been recognised in every Act for the construction of new railways, by the introduction of a clause of which the following is a copy :—

“No station shall be considered a terminal station in regard to any goods conveyed on the Railway, unless such goods have been received thereat direct from the consignor, or are directed to be delivered thereat to the consignee.”

If the railway companies were not entitled to charge terminals for the use of the stations, the insertion of such a clause in Acts of Parliament would be meaningless; the intention of the clause evidently was that the companies may not charge terminals in respect of any intermediate station or junction, and the fair inference is that they may do so at the sending or receiving station. (1)

(1) *Hall v. L. B. & S. C. Railway*. Manisty, J., L.R., 15 Q.B.D. p. 544.

The equitable nature of the claim of the railway companies to make terminal charges has been admitted on several occasions by some, if not by all, of the railway commissioners. Their refusal to consider terminal charges as legally justifiable has arisen only from the doubt which existed in their minds as to the strict construction of the words of the clauses; and that question has now been decided by the Queen's Bench Division in "*Hall v. The London Brighton and South Coast Railway Company*." Some portions of the judgment of the Court in that case deal only with the construction of the sections of the particular Private Acts of the defendant company; but the remarks of the Judges upon the general principles which govern the railway companies, claim to make terminal charges, explain so clearly their natural equity as well as their legality, that they may not improperly be quoted:—

"This notion of the railway being a highway for the common use of the public, in the same sense that an ordinary highway is so, was the starting point of English railway legislation. It is deeply engrained in it. In the early days of railways it was acted upon at least occasionally, and in respect of goods traffic, and although it enters but slightly into modern railway practice, *no proper understanding of a good deal of our railway legislation, and pre-eminently of clauses relating to tolls or charges, can be arrived at, unless it is firmly grasped and steadily kept in view.* Those states of things were from this point of view to be expected and to be provided for by legislation. The company might be merely the owners of a highway and toll takers for the use of it by other people with their own carriages and locomotives. That state of things would be worked out by the railway company possessing the mere line of railway from end to end, and by the persons making use of it, buying or renting contiguous land whereon to keep their rolling stock, and have their offices, availing themselves of the powers of Section 76 of the Act of 1845, and getting on to the railway by means of sidings connected with the railway.

“ A second state of things, as we know from the evidence in this case
 “ to which by the consent of the parties we are at liberty to refer, prevailed
 “ extensively for many years after the railway system was in full
 “ operation, and for some years at least after the passing of the Act of
 “ 1845. The railway company provided the line and provided the engines
 “ and trucks, but they were not carriers. The large warehouses and sheds
 “ wherein goods were received, sorted, loaded, covered, checked, weighed
 “ and labelled, and trucks or carriages marshalled and prepared for con-
 “ venient removal to their various places of destination—a corresponding
 “ work was done in respect of goods arriving from a distance—the staff of
 “ clerks, bookkeepers, porters, workmen, and horses necessary for these
 “ operations were all provided and maintained at the expense of the carrier,
 “ and no portion of them fell upon the company. The company, on the
 “ other hand, as owners of the rolling stock, for the use of which, as well
 “ as of their railways, they received payment, provided whatever accommo-
 “ dation they needed in order to keep in convenient proximity to the places
 “ where the carrier had his depôts the necessary supply of rolling stock.

“ The third state of things which might exist simultaneously with the
 “ second, or might be the one prevailing exclusively on a particular line,
 “ existed when the company were themselves the carriers of the goods, and
 “ when as carriers they provided the accommodation and performed the
 “ services above described.

“ The company might thus be: 1, toll-takers and neither conveyers
 “ nor carriers; 2, conveyers but not carriers; 3, carriers. It would
 “ naturally be expected that in the first case they would have powers to
 “ take tolls, and tolls only, and that in the second, they would have power
 “ to make charges, which should include tolls and charges for the use of
 “ rolling stock, and it would seem reasonable enough that (inasmuch as
 “ they would probably have much greater facilities for keeping and using
 “ their rolling stock to advantage and with economy than any other person
 “ could have) where they provided both trucks and locomotives as well as
 “ took tolls, the maximum charge should be lower than the aggregate of
 “ the three separate charges which they might make for, 1, use of railways;
 “ 2, use of carriages; 3, locomotive power.

“ It would seem natural also to expect that where the company were
 “ carriers, inasmuch as they performed the identical services which they
 “ perform under the second head, and others besides, they should be
 “ allowed to charge the same sums as they might charge when falling under

“ the second category, *plus* those which are appropriate to the extra
 “ services and liabilities which fall upon them when they undertake the
 “ duties and business of a carrier.

“ The contention of the applicants appears to us singularly unreason-
 “ able. It was proved before the Railway Commissioners, and is not
 “ disputed, that the actual cost to the company of the accommodation and
 “ services, which, for many years after the railway system was very
 “ largely developed, and all the principal lines in the kingdom were at work,
 “ were on some of the most important railways in England provided by inde-
 “ pendent carriers, and did not fall upon the railway company, amounted
 “ to 1s. 5d. per ton ; and it is admitted that, even with the help of the six-
 “ mile clause, the company, if the contention of the applicants is correct,
 “ would, in the case of traffic carried not more than six miles, have to carry
 “ goods coming under class 5, at a dead loss, which may be approximately
 “ stated as 8d. per ton for station services alone, besides getting nothing
 “ for the use of railway and trucks and for providing power.

“ The charges of and incidental to ‘conveyance,’ as we have explained
 “ that phrase, are properly measured by the mile of distance travelled over.
 “ The terminal services of station accommodation, loading, watching,
 “ checking, and the like, have no common measure with the distance run,
 “ and are the same, whether that distance be two or two hundred
 “ miles. . . .

“ Our answer, therefore, is that the providing of station accommoda-
 “ tion, and work of the general nature indicated to us by the Railway
 “ Commissioners, appear to us to be capable of falling under the definition
 “ of ‘services incidental to the duty or business of a carrier,’ and *prima*
 “ *facie* to do so. Whether in any particular case they do so, or to what
 “ extent they do so, must be a question of fact for the Commissioners, the
 “ line we should draw being, that whatever is necessary for ‘conveyance’
 “ in the sense in which we have defined it—being all capable of being
 “ measured by reference to the distance travelled—is covered by the mileage
 “ rate. Whatever is properly incidental, not to conveyance, but to the
 “ performance of the duty and business of a carrier . . . that is to
 “ say, is actually performed and is done at a terminal station, may be made
 “ the subject of a separate reasonable charge.

“ How could the Legislature ever provide for every single station on this
 “ line, for every terminal station, what was a proper charge? It could
 “ only be done by limiting it, as it has done, by ‘a reasonable sum,’ and

"it is for the Railway Commissioners to say what is a reasonable sum, under the circumstances at each terminal station. 'No station is to be considered as a terminal station in regard to any goods conveyed on the railways of the company unless such goods have been received thereat direct from the consignor of such traffic, or are directed to be delivered thereat.' Therefore terminal stations are recognised, and terminal charges are recognised distinctly."

Sir Bernhard Samuelson observes that terminal charges are a necessary corollary of the Foreign mileage rates,¹ the scientific basis of which he so much approves; the equity of, and right to make terminal charges is equally a corollary to the system upon which the rates in this country have been fixed. The maximum charges for the user of the road, the user of the truck, and the provision of the engine are capable of being fairly measured by reference to the distance travelled. They are, therefore, properly the subject of a mileage rate. But the providing of station accommodation, and work which the Railway Companies perform as carriers—as distinguished from mere conveyance—have no relation to mileage. They must reasonably be—as it has been held in the case of "*Hull v. The London Brighton and South Coast Railway Company*," they legally are—the subject of an additional charge.

We may here correct a common error. The opponents of terminal charges are in the habit of speaking and writing of them as if the companies claimed that they might at their own discretion demand such payments as they thought fit.²

(1) Report to Associated Chambers of Commerce.

(2) "The claim of railways to charge terminals would have to be considered if mileage rates are adopted in principle. That charge could in no wise be left to the discretion of the railways themselves, as was proposed in the Bills of last Session."—Sir E. SAMUELSON.

The railway companies have never contended that they were entitled to make arbitrary terminal charges. Indeed, such a contention would be a legal absurdity. On the contrary, they have always submitted that, while their right to make those charges was undoubted, the amount must not only be reasonable, but also be subject to review by the Railway Commissioners under the 15th Section of the Regulation of Railways Act, 1873. Sir Bernhard Samuelson is inaccurate in stating that the railway companies proposed by their Bills of last Session to make those charges subject only to their own discretion. While strongly relying both upon their legal right and the justice of their claim, the railway companies were willing to submit proposals to the consideration of Parliament for a re-settlement of their powers in this respect. But they expressly provided that the Railway Commissioners should have power to hear and determine any question or dispute which might arise with respect to the amount or reasonableness of any terminal charge made by the company, and that any decision of the Commissioners as to terminal charges should be binding and conclusive on all Courts and in all proceedings whatsoever;” words borrowed from s. 15 of the Regulation of Railways Act, 1873.

A few details as to the law and practice on this subject in Continental countries may be useful. And, first, as to Germany. When the question of the introduction of a new tariff for the German railways was under consideration, it was agreed that in previously fixing the railway rates, sufficient consideration had not been given to the expense incurred at the sending and receiving stations, irrespective of the distance the traffic was carried. The result of

the calculations which were made was that those expenses should be estimated at 12 marks per truck load of ten tons. This was accordingly adopted as the standard figure for all goods carried in wagon loads, while for small consignments the charge was fixed at 20 marks. The addition of those normal allowances to the rates on traffic to be carried short distances would have considerably increased the charges previously made. It was accordingly agreed, as a compromise, to graduate the terminal charges for short distances; the graduation being simply the means of avoiding what might have been considered a large increase in the railway rates, in consequence of the adoption of the "reform tariff system." These terminals represent the working expenses at the forwarding and receiving stations, the labour of receiving the goods from sender, marshalling or shunting the trucks to the sidings set apart for the delivery of the goods, and also the expense incurred by railway companies for stationery and clerkage; but they do not include the expense of loading and unloading, except in the case of *Grande Vitesse* and "*Piece Goods*," They vary from 10d. per ton in full truck loads of 10 tons, to 2s. per ton of general goods, and in the special tariff classes, which include minerals, from 7½d. in full trucks of 10 tons to 1s. 2½d. per ton.

In Belgium there is a fixed charge of 1 fr. per ton of 1,000 kilogrammes for the use of station and for clerkage; but it does not include loading and unloading, or booking, counting, or advice of arrival of goods, for all of which services extra charges are authorised and, in fact, made. This is practically a terminal charge.

In Holland the terminal charges vary from 1s. 2d. to 1s. 6d. per ton in the truck load classes, and 2s. 6d.

per ton in respect of ordinary or "*piece*" goods in quantities of less than 5 tons. In the latter case the cost of loading and unloading is included in the terminal charge, but not in the truck load classes. In neither case are weighing, counting, stamping freight note, labelling or advice of arrival included. For all of these services extra charges are made.

In France only small charges varying from 20 cents. per ton for goods in full truck loads, to 35 cents. per ton for goods in less quantities, are made for the use of stations, though there are various charges for loading and unloading, booking, advice of arrival, and other services. Either, therefore, the traffic for short distances is carried at a loss, or no adequate return to cover the use of station and conveyance is obtained—a course, which, assuming the outlay upon a railway is entitled to a fair return, is opposed to sound commercial principles.

NOTE.—The terminals authorised and charged in these countries will be found fully set out in a tabular form in the Appendix III.

SECTION XII.

THE CONSTRUCTION OF RAILWAYS IN ENGLAND AND ON THE CONTINENT.

SOMETIMES it is asserted, although it is more often taken for granted, that all railway rates on the Continent are more favourable to traders than English rates. Upon this assumption is based the contention that the reduction of the latter may fairly be demanded. Whenever such statements have been carefully examined—*e.g.* in the inquiry before the Joint Committee of 1872—they have been proved to be erroneous. Nevertheless, they are still constantly repeated. More than once it has been publicly stated that in Germany, Holland, Belgium, &c., “rates are fixed on a scientific basis, and an intelligible principle,” while in this country they are “haphazard and estimates.” Seldom is there any attempt to make good such assertions and criticisms. The report made by Sir Bernhard Samuelson to the President of the Association of the Chambers of Commerce of the United Kingdom on the “Railway Goods Tariffs of Germany, Belgium, and Holland, compared with those of this country” is an exception, and on that account is specially important. That report endeavours to prove by figures that rates in this country are excessive. It has been cited—though, probably, such was not the intention of the author—as if it were an indictment of English railways; and the purport of it is to show that English rates ought to be reduced, and that, unlike the rates on the Continent they are fixed on no proper

basis. Now, even if the difference between English and Continental rates were as great as Sir B. Samuelson describes, no inference unfavourable to English railways could be fairly drawn. No comparison could be useful which did not take into account the fact that railways in Great Britain have been constructed with private capital subscribed and expended on the faith of definite powers conferred on the companies by Parliament. Sir Bernhard Samuelson, however, passes lightly over the dissimilarities which mar his comparison; the widely different circumstances under which foreign lines were constructed; their much smaller original cost per mile, and the fact that most of the lines to which he refers were either constructed or assisted by the State, have been purchased by it, or have received State guarantees. The English railway companies obtained simply authority from Parliament to purchase compulsorily the land required, and to construct the necessary works. (1) On the other hand, the railways in the countries to which his report relates were, to a great extent, either originally constructed by the State, or the companies have been assisted by contributions towards the cost of construction, or a minimum rate of interest upon the capital provided and expended by them has been guaranteed to them, or the lines have been afterwards acquired by the State.

It is remarkable that Sir Bernhard Samuelson's report gives no information as to the railways of France, though the nearest of the Continental countries, and though many of her products compete with ours. To correct this deficiency, it may be desirable to mention a few facts. The French

(1) There are some cases in Ireland in which Baronial Guarantees in respect of portions of the capital of railways have been given.

Government constructed the first railways opened in that country or made advances for that purpose without charging interest; and they have since made or purchased other lines. In aid of the original lines for which concessions for 99 years were granted, the State in France contributed a vast amount, as appears by the following statement:—

Amount contributed by the State as shewn at December 31st, 1882	... ..	£66,639,549
Divers contributions also given by towns to the extent of	... ..	1,753,992
The Companies have themselves provided	...	340,421,032
		<hr/> £408,814,573

Upon the State railways (that is, for lines now worked by the Government) they have expended to December, 1882	... ..	33,851,598
In addition to which divers subscriptions were given by towns to the extent of	... ..	1,305,334
		<hr/> £443,971,505

Out of which the State (as shown above) provided	... ..	£100,491,147
		<hr/> <hr/>

The total amount was thus found in the following proportions:—

A.—By the State on lines		
worked by the Companies	15	per cent.
On lines worked by the State	7·6	per cent.
	<hr/>	
	22·6	
Contributions made by		
towns, &c.	... ..	0·7 per cent.
B.—Capital provided by the		
Companies	... ..	76·7 per cent.

The total capital expended on French railways up to the end of 1884 had increased to £532,960,000,¹ of which sum the State had provided £148,680,000, or 27·9 per cent. ; in addition to which the subscriptions given by towns amounted to ·8 per cent. Thus, up to December 31st, 1884, the capital provided by the companies themselves was not more than 71·3 per cent. of the whole. The French Government have also guaranteed the dividend on four of the great lines at rates varying from 7 to 12 per cent. Two other great companies may pay 11 and 13·5 per cent. dividend respectively before they can be called upon to construct any new lines; while all the six companies may earn dividends varying from 10 to 22 per cent. before they are bound to divide any surplus with the Government.

A portion of the capital of each company is paid off annually beyond the guarantee; and at the end of the period of concession the railways will become the property of the State. The advances made to the companies under the guarantees by the Government, with interest at the rate of 4 per cent., are to be repaid out of any surplus beyond the maximum dividends which may be paid. If at the end of 99 years, any of the companies still be in debt, the Government are to be entitled to take without payment as much of the rolling stock as may be required to repay the debt, as far as the value of the stock may do so. By the conventions of 1883, the Government arranged with the companies to which they had given guarantees, that when a request to that effect is made by the State, new lines are to be constructed up to the amount of their

(¹) This capital relates to the principal lines only.

debts at the end of 1883. In some cases this duty is incumbent only when the dividends paid by the companies reach or exceed the maximum percentage already mentioned. In addition to the large sum expended by the French Government on, or towards the original construction of railways, the total amount advanced to the companies to make up the guaranteed dividends' amounted to December, 1883, to £23,592,000 and for the year 1884 to 2,250,000

£25,842,000

The interest on these advances amounted
to December, 1883, to... .. 5,904,000
and for the year 1884 to 36,000

£31,782,000

(1) The Report of the French railway Commission of Inquiry appointed in 1880 states: "Our railway companies have been largely "subventioned for the construction of their lines, almost all receive "annual subsidies, without which they could not meet the charges of their "working expenses; all enjoy a monopoly which shelters them from in- "ternal competition; we have the right to demand from them, to force "upon them, reforms that public and parliamentary opinion deem indis- "pensable." And again—" * * * In certain countries, England for ex- "ample, where the system of liberty and commercial competition is largely in "vogue, it is right that the railway companies, who have received nothing "and from whom nothing is demanded by the State, and who may be con- "sidered only as belonging to the category of private merchants and "manufacturers, should have greater freedom in dealing with their traffic "and tariffs than is enjoyed in this country (France)."

But it is added: "It is not the same with Continental European nations. "The Governments of Belgium, Holland, Bavaria, the Grand Duchy of "Baden, Austria, Italy, Hungary, Russia, Sweden, and Norway are wholly "or in part proprietors of the railway system."—*Appendix 31 to Report from the Select Committee on Railways (Rates and Fares) 1882, Vol. II., page: 453-4.*

In France the State has not pursued in regard to railways a policy strictly commercial. It has made great sacrifices to provide railways, in the hope of securing to the country indirect ulterior gains. For the sake of their development it has incurred great expenses which excite in some minds grave anxiety.⁽¹⁾

In Germany most of the railways are now the property of the State.⁽²⁾ In 1884, the various Governments owned 19,610 miles, and they worked another 496 miles for the

(1) "La dépense tout à fait stérile des 500 millions pour racheter des lignes ferrées improductives, les exagérations du projet Freycinet lors de sa naissance et les extravagances de développements postérieurs qu'on lui a donnés, ces sommes énormes dépensées en des canaux de transport, qui, pour beaucoup du moins, font double emploi et jouissent d'aucun trafic, toute cette mauvaise direction a absorbé les ressources de l'État en sacrifices inutiles et ne lui a pas laissé le loisir de supprimer l'impôt sur la grande vitesse, les timbres sur les récépissés des chemins de fer, et d'obtenir, par un juste retour, des réductions de tarifs qui n'auraient été accompagnées d'aucune augmentation d'impôt."—M. LEROY-BEAULIEU in *L'Economiste Français*, February 27th, 1886.

(2) It is generally assumed that the railways in Germany were purchased with the view of more effectually utilising them, and the rolling stock for military purposes. The Government in this country are under no necessity to undertake the liability of acquiring the railways and guaranteeing the dividends for such a reason; the number of lines of railway and routes are so ample, and the number of engines, carriages, and wagons so great, that any movement required for the defence of the country can be carried out within any reasonable time, while under the Regulation of the Forces Act, 1871, Her Majesty, by Order in Council, may empower any person or persons, named in such warrant, to take possession of any railroad and of the plant belonging thereto, and to use the same for Her Majesty's Service at such times and in such manner as the Secretary of State may direct; and the directors, officers, and servants of any such railroad, shall obey the directions of the Secretary of State.

companies, leaving only 2,503 miles out of a total of 22,611 to be worked by the railway companies. Of the railways which are the property of the State, about two-fifths were constructed, and the remainder were purchased by it. Of the total capital outlay of £485,831,766 on German railways, £437,728,471 has been expended by the State in constructing or purchasing them, and £48,103,295 has been provided by the companies themselves. The return upon the capital outlay of the State railways has been—⁽¹⁾

1880-1	...	...	...	4.87 per cent.
1881-2	...	...	...	5.01 „
1882-3	...	...	...	5.22 „
1883-4	...	...	...	4.86 „
1884-5	...	...	...	5.06 „

This shows an average for the five years of about 5 per cent. per annum.

In Belgium, out of a total mileage at the end of 1884 of 2,711 miles, the State owned 1,930, or more than 71 per cent. of the railways. The outlay upon this mileage was as under :—

(a). Cost of railways actually purchased	...	£36,668,915
(b). Amounts payable by annuities	... ..	12,442,804
(c). Capital expended on lines worked by State		3,900,653
		<u>£53,012,372</u>

The interest paid by the Belgian Government on the above capital outlay was—

- (a). 4 per cent.
- (b). 4, 4½ and 5 per cent.
- (c). 4½ per cent.

⁽¹⁾ See note, page 118.

The gross receipts on the State railways for the year		
1884 amounted to—Coaching ...	£1,620,565	
Goods ...	3,088,108	
Sundries ...	98,971	
	<hr/>	
	4,807,644	
and the expenses to ...	2,871,268	
	<hr/>	
leaving net receipts... ...	£1,936,376	

Upon a capital outlay of £53,012,372, these figures give an average dividend of nearly $3\frac{1}{4}$ per cent. It would, therefore, appear that the working of the State railways results in a loss to the Government, which the public have to make up by increased taxation.⁽¹⁾

(1) In the Report of May 3, 1882, made by Sir H. Barron to the then Minister for Foreign Affairs (Earl Granville) (part 4 of the "Reports by Her Majesty's Secretaries of Embassy and Legation on Manufactures, Commerce, &c.") on the subject of the Belgian Budget, the former stated that "The 5 years from 1876 each closed with a deficit rising in 1881 to 6½ million francs (£250,000), the main explanation being the ever-increasing burden thrown on the Treasury by the extension of the railway, which undertaking has ceased to cover its charges and completely disturbed the financial equilibrium of the State. The first lines constructed and worked by the State, being great trunk lines, gave every year an increasing return which enriched the Treasury. To these were first added conceded lines, which had to be purchased from companies at high prices; then secondary lines, whose traffic was unremunerative. After many previous experiments, the accounts of the railway have been since 1878 drawn up on a new and presumably more accurate principle. The Treasury is now considered as the bankers of the railway; it is assumed that all funds advanced by the former are chargeable with an interest of 4 per cent., and repayable within ninety years. According to this new method of book-keeping, it appears that the railway contributed largely to the revenue until 1872 inclusively, but that since

In Holland also, the railways are owned to a large extent by the State, to which belong 797 miles out of a total of 1,617 miles. The State does not, as in Germany or Belgium, work its own lines. It leases them upon certain

that year it has, on the contrary, entailed an annual loss. Thus, the deficit of 1881 is for the greater part (4,861,725 fr.) due to the insufficiency of the railway revenue. Fortunately Belgium has a resource at hand."

"The Minister of Finance in the debate on the Budget of Public Works, "points to that resource in the following pregnant words: It is proved "that the railway fails to cover its charges by about five millions " (£200,000). We are informed that this year the deficiency may be "seven millions; in 1883, possibly even ten millions. What will it be "in 1884? No one knows, but the progression is ascending. Must we "follow it without counting the cost? Must we raise the tariffs or "throw on the Treasury the burden caused by the insufficiency of the rail- "way receipts? *Either the railway must be worked on a principle which shall "allow it to cover its charges or the taxpayers must make up the difference."*

He further added that in his report of 1876 he recommended "a raising of the tariff." Sir H. Barron goes on to state "*that the inferior productiveness of the Belgian Railway was due to the inadequate tariff, which, for passengers and merchandise, was much lower than those prevailing in the rest of Europe.*" He further remarks, however, that "*notwithstanding all this it has been held that the experiment is a great success, and bears evidence in favour of State ownership, because, as the railway is worked in the interest of trade, &c., it is considered that the benefit thus indirectly accruing to the public at large, is greater than that which might be realized by aiming at a commercial profit for the direct and immediate benefit of the taxpayers.*"

The construction of railways in Belgium has, no doubt, developed the commerce and industry of the country to a remarkable extent. It was stated by Sir Bernhard Samuelson (page 9 of Report) that the receipts of railways had increased from £1,815,000 in 1870 to £4,880,000 in 1883, or 168 per cent.; but he omitted to point out that the length of the railways had increased by more than 250 per cent.

See the observation of M. Leon Say as to the tendency to reduce railway tariffs to an unremunerative point when the State is the owner.—*Le Rachat des Chemins de Fer, Journal des Economistes*, 1881, p. 343.

conditions to companies, viz., to a Company for working the State railways and to the Holland Company. The companies provide the rolling stock and staff, and maintain the line; but they do not execute "works of art" or repairs arising from circumstances over which they have no control, such, for instance, as war, inundations, landslips, &c. Materials for the execution of works have to be conveyed at a very low rate. All rates must be submitted to the Minister of Public Works for his approval; and the mails must be carried free. From the gross receipts are made deductions at the rate of £67 per mile of single, and £134 per mile of double line per annum, which serve as a fund to cover repairs. Eighty per cent. of the remainder is retained by the company. The balance of the receipts belongs to the State. If, however, the company's percentage, plus the deductions, do not amount to £644 per mile, the gross receipts are so apportioned as to yield that amount. If the net profit of the company exceeds $4\frac{1}{2}$ per cent. upon their capital, the surplus up to 5 per cent. is divided equally between the State and the company; and any further surplus, is distributed in the proportion of four-fifths to the State and one-fifth to the company. The total capital expenditure on the Dutch State Railways to the 30th June, 1885, was:—

On lines worked by the Company for		
working the State Railways ...		£15,958,328
„ „ Holland Company .		3,477,914
		<hr/> £19,436,242

The amount received in respect of dividend or interest for the year from both working companies was £158,170 or about '81 per cent. on the capital involved.

There is a remarkable difference in the cost of construction of English and Continental lines—a fact of which Sir B. Samuelson takes no adequate account when he says “the average cost of construction has been considerably less in the case of German railways than in that of our own.” Without citing many figures on the point, it may be stated that at the end of 1884 the amount of capital expended in the construction of railways in the United Kingdom was £801,464,367, or £42,486 per mile of line opened; and in England and Wales alone £665,055,379, or £49,854 per mile. If the rates for carriage of goods and passengers were based solely on cost per mile, those in force in the United Kingdom and England and Wales respectively would exceed the rates of other countries to the extent shown in the following table:—

	On the average cost in the United Kingdom.	On the average cost in England and Wales.
France	By 45·41 per cent.	70·62 per cent.
Germany	By 97·73 per cent.	132·02 per cent.
Belgium (State)	By 54·67 per cent.	81·13 per cent.
Holland	By 121·42 per cent.	159·82 per cent.

Not only has the construction of the railways in this country been more costly, but private companies have accomplished a task which has not yet been fulfilled in some Continental countries, even with all the aid of the State, and which, if ever fully carried out, must entail further liabilities upon the Governments of those countries. In England private companies have not only made trunk lines, but, to a degree unknown abroad, they have constructed

branch lines, penetrating into sparsely-peopled districts of the country, yielding little traffic, and necessarily involving heavy working expenses and loss of interest. Official figures show that private enterprise has hitherto given one mile of railway to every

	6.41	square miles in the United Kingdom,
	4.36	„ „ England and Wales,
as compared with		
	10.42	„ „ France,
	9.38	„ „ Germany,
	4.2	„ „ Belgium,
	7.82	„ „ Holland.

It further appears from official statistics that the capital outlay for every 1,000 inhabitants has been

£22,287 in the United Kingdom.
24,512 „ England and Wales,
13,977 „ France,
10,593 „ Germany,
11,365 „ Belgium,
7,252 „ Holland.

NOTE.—The figures relating to the capital, revenue and working expenses of the German Railways have been taken from the “*Statistische Nachrichten von den Eisenbahnen des Vereins Deutscher Eisenbahn-Verwaltungen*,” which differ in some respects from those contained in statements obtained after going to press from the Department of the German State Railways; the latter giving the revenue for the working year 1884-5 as £50,735,165, the expenses as £29,057,889, or 57.27 per cent. of the receipts. The balance would yield a return of 4.51 per cent.

SECTION XIII.

WORKING OF ENGLISH AND CONTINENTAL RAILWAYS—
COMPARATIVE FACILITIES AFFORDED BY THEM.

So much for the strikingly different modes in which the English and continental railways have been constructed; the one system a history of unaided private enterprise, the other a history of a policy pursued by great States with the resources of Imperial Exchequers, and with English experience as a guide. Had railways in this country received the same assistance as foreign lines, the cost and working expenses being the same, the demand that the former should have rates as low as the latter would not be unreasonable. But a comparison of the facilities afforded here and on the Continent to trades and production will not be unfavourable to the English companies. It will be seen that, in the words of the late Professor Stanley Jevons, "Taking all circumstances into account, England and Wales are better supplied with railways than any other country in the world," whether we have regard to extent or efficiency.

In the first place, it is well known that the time occupied in the conveyance of goods is less in this country than on foreign railways. In France, for instance, the time allowed by the orders of the Minister of Public Works, before forwarding for the purpose of loading, is one day; for the transit of goods over a distance of

93 miles, there is another clear day—making two days; and for a distance of 170 miles, three days, exclusive of the time necessary for collection and delivery. In other words, traffic delivered at a station on a Monday, must be at the disposal of the consignee on the Thursday morning following at any station within 150 kilometres (93 miles) distant from the sending station. If the goods have to be “delivered to domicile”—that is, at the consignee’s residence or place of business—the time allowed by the tariff for delivery is one day—that is, in the case supposed, they must be “delivered to domicile” during the Thursday. No doubt, goods requiring speedy transit can be forwarded by *grande vitesse* (ordinary passenger train), a service which is equivalent in respect of speed to a large portion of the goods trains in England. But the rates charged for conveyance by *grande vitesse* in France are about three times as much as the highest class rate by goods train.

In Germany, the general regulations prescribe the maximum time for delivery of goods as follows: for “*Eilgut*” (goods carried by passenger train), one day for loading and forwarding, and one day for every 300 kilometres (186 miles) or part thereof. For “*Frachtgut*” (goods train traffic), two days may be taken for loading and forwarding, and for the first 100 kilometres (62 miles) one day; for every part of each subsequent 200 kilometres (124 miles) one day. The time of transit is assumed to commence at midnight following the date of the stamp on the consignment note.

In Holland, the time allowed for “express goods” before forwarding is 24 hours, and for conveyance for each 186 miles or part thereof, another 24 hours.¹ For general goods

(¹) For further particulars see Appendix III.

the time allowed before forwarding is 48 hours and for the conveyance, 48 hours for each 186 miles or part thereof. As in Belgium, the time allowed for transport commences at midnight following the stamping of the consignment note.

In Belgium all goods carried under the conditions of tariff No. 3¹ (which applies to consignments exceeding 4 cwt. in weight) are due at the receiving station three full days after delivery of the goods to the company. This does not apply if there is a glut of traffic; and another full day is allowed if the railway company deliver by cart.

Goods may by law be kept in some of the countries which have been mentioned for two days before being despatched; two clear days are allowed for 186 miles or part thereof; and when rapid transit is required, as in case of express goods, the rates are much higher than those charged by goods train. In this country, on the other hand, goods are, as a rule, forwarded on the day or during the night of the day on which they are brought to the station; and between important places within 200 miles, goods are usually delivered the following day. As a matter of general practice, the maximum time allowed abroad is not fully occupied; but it is recognised by law. This advantage which the foreign railways possess implies others, which can only be fully appreciated by persons practically acquainted with the mystery of railways. The ample time allowed before forwarding and in transit permits of considerable economy in the use of wagons. Opportunities are afforded for making full wagon and full train loads. This circumstance, too, reduces train mileage. A further consequence is the diminution of claims for compensation and in other items of expense. The speed

(¹) For particulars see Appendix III.

of the trains being slow, and the time allowed in transit being great, larger loads are practicable.

Liability for compensation for delay or damage in transit is another element to be taken into consideration in any comparison of rates. In Belgium and Holland, where rates are especially low, the liability to pay compensation is very limited. Belgian railway companies are not responsible in the case of goods carried under the conditions of tariff No. 2, unless specially insured, for a delay of one day after the time allowed for delivery, or in the case of goods carried under tariff No. 3 (all consignments above 4 cwts.), for a delay of two days after the time allowed for delivery. Their responsibility for delay in excess of these times is, moreover, limited to one-tenth of the carriage for every day's delay. Goods are considered to be lost if not delivered after the expiration of fifteen days. For loss or damage to merchandise, carried by goods train, the companies are responsible only to the extent of 75 cents. per kilogramme (3½d. per lb.). The responsibility of the companies in Holland, for delay to ordinary goods beyond 24 hours, after the time allowed for delivery, is, up to 72 hours, limited to one-fourth, up to 8 days one-third, and beyond that period one-half of the freight. For whole or partial loss the maximum liability is £2 10s. per cwt. To enable the public to recover, either in the case of delay or loss, the full value of goods, they must be insured at specified rates. These particulars show the advantages of foreign railways in this respect; the difference may be made still clearer by citing a few figures as to the working of this system of legal limitation of liability in Belgium and Holland and of the virtually unlimited liability in force in

this country. In Belgium the amount paid for compensation for delay or damage to merchandise traffic carried on the State railways in the year 1884 was £7,772, or .25 per cent. on a revenue of £3,088,109, and on the Dutch Rhenish Railway it was £274, or .16 per cent., on a revenue of £173,079. In the United Kingdom the amount was £202,400, or, .54 per cent., and in England and Wales £17,140, or, .55 per cent., on a revenue from merchandise and mineral traffic of £37,670,592 and £31,973,011 respectively. Of these last amounts £15,528,656 and £13,398,433 were in respect of minerals on which no compensation is, in practice, payable.¹

The rates for merchandise in Holland and Belgium are the lowest of any of the countries. Independently of the construction of the lines being cheaper, the wages paid to servants less, and the State being the principal proprietors, natural causes favour this. From the flatness of those countries and their consequently having exceptionally level railroads, the average loads far exceed what can be carried in the United Kingdom. In Holland 450 to upwards of 500 tons are the usual train loads. Even on the Northern Railway of France an average load of 400 to 450 tons is common. Owing to the gradients of the lines and the speed of the trains, such weights are rarely carried in this country. The consequence of the paying load being less is, of course, that the working expenses are proportionately greater.

Branch lines in this country have, as has been already stated, been carried into sparsely populated districts to

(¹) In Germany and France the law as regards liability is practically the same as in this country.

an extent unknown in France, Germany, Belgium or Holland, and the English railways afford greater facilities by reason of a larger proportion of the lines being double.

The following table shows the state of things in 1884 :—

Year.		Double Line.		Single Line.		Total mileage.
		Length.	Per Centage.	Length.	Per Centage.	
1884	United Kingdom ...	10,239	54·28	8,625	45·72	18,864
1884	England and Wales	8,604	63·75	4,836	36·25	13,340
1884	France ...	7,470	38·84	11,765	61·16	19,235
1884	Germany ...	6,724	29·74	15,887	70·26	22,611
1884	Holland (?)...	435	26·90	1,182	73·10	1,617
1884	Belgium ...	943	34·80	1,768	65·20	2,711

It is well known that train service in this country is much more frequent than in any other country. How great is the difference will be seen by comparing the average number of train miles run per mile of railway, per square mile of country, and per 1,000 people.

TRAIN MILES.(?)

Year		PER MILE OF RAILWAY.		PER SQUARE MILE.		PER 1,000 PEOPLE.	
		Passngr.	Goods.	Passngr.	Goods.	Passngr.	Goods
1884	United Kingdom ...	7,588	6,715	1,185	1,048	3,981	3,523
1884	England and Wales ...	9,114	7,991	2,090	1,832	4,481	3,929
1884	France ...	4,644	2,792	415	250	2,222	1,336
1884	Germany ...	3,997	2,610	426	278	1,971	1,287
1884	Holland ...	4,941	1,762	600	213	1,773	629
1884	Belgium ...	4,819	4,783	1,149	1,140	2,258	2,241

In comparing the results of the working of the German and English railways, Sir B. Samuelson states in

(1) Including 90 miles on German and Belgian Frontier.

(2) The mixed train mileage introduces a disturbing element, but the calculations have been made as accurately as possible.

the report already quoted, that "The proportion of net to gross receipts is not unfavourable to the German lines." He adds that "it is all the more remarkable when it is considered that the tariffs for both passengers and goods are much lower; the cost of materials, generally speaking, higher; and that large sums are in Germany defrayed out of revenue, which would here be charged to capital."¹ The meaning, apparently, of these observations is that railways in this country ought to be worked more cheaply than in Germany; that passenger fares and merchandise rates are lower in that country, that nevertheless the receipts are satisfactory; that the rates for goods should be here reduced; and that, thereby, better results would ensue. Let us put these statements to the test of figures,² and, first, as to cost of working, no doubt a material element in the comparison of rates. For the year 1884 the gross receipts of all the railways in the United Kingdom and in England and Wales respectively amounted to—

RECEIPTS.	UNITED KINGDOM.	ENGLAND AND WALES.
	£	£
Coaching	30,030,450	25,584,196
Goods and Minerals ...	37,670,592	31,973,011
Miscellaneous	2,821,601	2,541,804
Total	70,522,643	60,099,011

(¹) See page 5 of Sir B. Samuelson's report. It is not known to what the observation as to charges to capital can refer. The larger (if not all) companies in this country charge to revenue portions of the cost of improvements to stations, sidings, &c., which might strictly be charged to capital. In the published returns of the working of German railways, there is nothing to show to what extent, if any, the cost of new works is charged to capital.

(²) The number of passengers, or tons of goods are not reliable for the

United
Kingdom.

England and
Wales.

The working expenses to £37,217,197, £31,732,486
or 52·77 and 52·80 per
cent. respectively; and the
net receipts to ... £33,305,446, £28,366,525,
The gross receipts yielded an average of—

	UNITED KINGDOM.		ENGLAND AND WALES.	
	Per Mile.	Per Train Mile.	Per Mile.	Per Train Mile.
	£	s. d.	£	s. d.
Coaching Receipts	1,592	4 2	1,918	4 2½
Goods and Minerals	1,997	5 11	2,397	6 0

The gross receipts of all the French railways, except the small local lines, for the same year amounted to:—

Coaching ...	...	£16,214,240
Goods and Minerals	...	21,743,480
Miscellaneous	... (about)	960,000
		<hr/> 41,917,720

The expenses to 56·45 per cent. of		
the receipts	... ..	23,662,160
and the net receipts to	... ..	<hr/>£18,255,560

purpose of comparison, inasmuch as a passenger or a ton of goods carried over two railways appears as two passengers or two tons, and therefore after various lines are amalgamated, the returns may show an apparent decrease when in fact there may have been an actual increase in traffic.

The results of the working of the French railways for the year may be briefly shown thus :—

	Per mile.		Per train mile.
Coaching	£889	...	3s. 10d.
Goods and Minerals	1,356	...	9s 8½d.

The results of the working of the German railways for the year 1884 were as under :—

	State Railways.	Private Railways.	Total of all Railways.
Gross receipts	£44,621,504	£4,127,569	£48,749,073
Expenses ...	24,267,185	2,206,937	26,474,122
Net receipts...	£20,354,319	£1,920,632	£22,274,951

The expenses being 54·38, 53·47, and 54·31 per cent., respectively, on the receipts—

The average amount per mile and per train mile of the following receipts :—

Coaching receipts	...	...	£12,989,912
Goods and Mineral	...	...	33,591,675
Miscellaneous	...	...	2,167,486
			<u>£48,749,073</u>

being	Per mile.	Per train mile.
Coaching receipts ...	£575	3s. 4¼d.
Goods, &c.	£1,486	9s. 10¾d.

The private railway companies in Belgium are not required to furnish the Government with returns similar to those supplied to the Board of Trade in this country. It is, therefore, difficult to obtain complete information on this head. But the results of the working of the State railways, which, as has been explained, form more than 71 per cent. of the whole system of the country, are accessible, and may for this purpose be taken as fairly representative.

Gross receipts of the State railways for the year 1884,				
viz., Coaching	...	...	...	£1,620,565
Goods and Minerals	...	...	...	3,088,109
Miscellaneous	...	...	...	98,970
				<hr/> £4,807,644

and the expenses to 59·72 per cent.

£2,871,268

leaving net receipts £1,936,376

Thus, the average amount of the gross receipts per mile, and per train mile respectively, is

	Per mile.		Per train mile.
Coaching	...	£840	...
Goods and Minerals	£1,600	...	5s. 11½d.

On the State, Holland, Dutch Rhenish, Dutch Central, and Brabant Railways, which comprise more than 90 per cent. of the whole railway system of Holland, the gross receipts for the year amounted to—

Coaching	...	...	...	£1,137,687
Goods and Minerals	...	...	...	859,797
Miscellaneous ¹	...	...	...	90,270
				<hr/> 2,087,754
the working expenses to	...	...	...	1,137,595
or 54·49 per cent.				<hr/>
and the net receipts to...	...	...	...	£950,159

The gross receipts yielded an average of—

	Per mile.	Per train mile.
Coaching	...	£744
Goods and Minerals	562	6s. 4½d.

The foregoing figures are summarised for convenience of comparison in the following tabular form :

(¹) It is assumed that some receipts for cattle traffic are included in this item.

COUNTRIES.	GROSS RECEIPTS.				PER CENTAGE (F GROSS RECEIPTS.*		Per Cen- tage of Expenses on Receipts.
	per mile.		per train mile.				
	¹ Coaching.	² Goods, &c.	¹ Coaching.	² Goods, &c.	¹ Coaching.	² Goods, &c.	
	£	£					
United Kingdom	1,592	1,997	4/2	5/11	42·58	53·42	52·77
England & Wales	1,918	2,397	4/2½	6/0	42·57	53·20	52·80
France	889	1,356	3/10	9/8½	38·68	59·03	56·45
Germany	575	1,486	3/4½	9/10½	26·79	67·29	54·31
Belgium (State)	840	1,600	3/1½	5/11½	33·71	64·23	59·72
Holland. State, Dutch Rhenish, Holland, Dutch Central and Bra- bant Railways.	744	562	3/0½	6/4½	54·49	41·18	54·49

From the above table it appears that the percentage of the working expenses upon the gross receipts on all the railways in Germany is 54·31 per cent., and on the State lines in Belgium 59·72 per cent. as compared with 52·77 per cent. in the United Kingdom. But analysing these figures, we find that the relative proportion of the whole receipts from the passenger traffic of the German railways is 26·79 per cent., and of the Belgian State railways 33·71 per cent., as compared with 42·58 per cent. in the United Kingdom. This difference, due to the greater development of passenger traffic in this country, considerably affects the comparison of the results of working. The ratio of working expenses in the United Kingdom, where the proportion of net revenue from passenger traffic is greater, and that from goods is less than in Germany or Belgium, is reduced to the

(¹) Coaching receipts embrace receipts from passenger and such other traffic as is carried by passenger trains, as nearly as can be classified.

(²) In calculating these per centages, the "Miscellaneous" receipts have been included in the gross receipts.

advantage of the goods traffic. If the revenue from passenger traffic in the year 1885, on the railways in the United Kingdom, had only been the same per train mile as in Belgium, the working expenses in the case of the former would have been raised to 59 per cent. The profits derived from passenger traffic are not only advantageous to the shareholders, but beneficial to the trade of the country. They have enabled the companies to pay moderate dividends, and also to carry merchandise traffic at a less profit. Any reduction in the revenue from passengers would cripple the railway companies, and prevent them being in as good a position to provide the accommodation, afford the facilities, and charge such rates as are required to develop the trade of the country.

Sir Bernhard Samuelson's reference to passenger fares calls only for a few remarks. Taking the average fares charged in this country per mile to be 2d. first, 1½d. second, and 1d. third class, with a reduction in return tickets, there is no very substantial difference between those fares and the fares charged in Holland and Germany (except that in the latter country there is a fourth class on some trains). Nor do fares here (including the Government duty), materially differ from those charged on the railways in France. The fares in Belgium are, for the reasons already stated, lower than those in this country. But if to the nominal fares is added the charge which would be made for the same weight of luggage as that which is carried free in this country, the difference is reduced.⁽¹⁾

The receipts per train mile from coaching traffic are 3s. 1½d. and 3s. 4½d. in Belgium and Germany respectively,

(1) See table at foot of the following page.

as against 4s. 2d. in the United Kingdom; a difference which, assuming that only the same receipts per train mile on the present train mileage were earned by the railways in this country, would involve a loss of revenue from £6,000,000 to £7,000,000 per annum. On the other hand, the receipts per train mile, from merchandise and mineral traffic, in the other countries, compare very favourably with those in the United Kingdom; they are 9s. 8½d. in France, and 9s. 10½d. in Germany, as compared with 5s. 11d. in the United Kingdom. Even in Belgium and Holland, where rates are low, the receipts are 5s. 11½d. and 6s. 4½d. respectively; results

(1) The passenger fares, excluding and including the charges for luggage, are:—

SCALE PER MILE OF PASSENGER FARES,

Excluding charge for luggage.

Distances.	FRANCE.			BELGIUM.						HOLLAND.			GERMANY.						
				Express.			Ordinary.						Express.			Ordinary.			
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	4th
10 Miles ...	1'91	1'43	1'05	1'50	1'10	0'80	1'17	0'95	0'65	1'60	1'30	0'80	1'76	1'29	0'91	1'53	1'17	0'82	0'47
50 Miles ..	1'91	1'43	1'05	1'48	1'09	0'73	1'16	0'89	0'59	1'60	1'30	0'80	1'69	1'27	0'89	1'50	1'13	0'75	0'38
100 Miles ..	1'91	1'43	1'05	1'47	1'09	0'73	1'16	0'87	0'58	1'60	1'30	0'80	1'69	1'27	0'89	1'50	1'13	0'75	0'38

Including charge for luggage.

Distances.	FRANCE.			BELGIUM.						HOLLAND.			GERMANY.						
				Express.			Ordinary.						Express.			Ordinary.			
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	4th
10 Miles ...	2'25	1'77	1'05	1'97	1'57	1'27	1'63	1'42	1'12	2'20	1'80	1'10	2'04	1'49	0'94	1'81	1'36	0'89	0'47
50 Miles ...	2'16	1'60	1'05	1'76	1'39	0'83	1'45	1'07	0'69	2'02	1'65	1'01	1'97	1'46	0'89	1'79	1'32	0'75	0'38
100 Miles ...	2'15	1'59	1'05	1'76	1'39	0'78	1'45	1'07	0'63	2'02	1'65	1'01	1'97	1'46	0'89	1'79	1'32	0'75	0'33

which, considering the low transit and other rates in the former, and the transit and special bargain rates in the latter, are satisfactory. Such figures show that, in addition to the advantages of better gradients and slower speed of trains, wagons and trains are more fully loaded than in this country ; they show, too, that notwithstanding the low tariff rates in many cases, the additional charges referred to in Appendix I., page vii—over and above the tariff rates—must yield a substantial revenue. Nor should we lose sight of the fact that traffic receipts in this country include, to a much greater extent than in those countries, charges for loading and unloading.

In the passage which we have quoted it is said that “the cost of materials” on the Continent is, “generally speaking, higher.” One cannot help observing the inconsistency of maintaining that the competition of the other countries by enjoying low railway rates injures the export trade of this country, and that the railways here have the advantage of obtaining fuel and rails cheaper. Is the latter statement clearly well-founded in view of the fact that German rails have been laid on some of the English lines, and that engines have also been supplied by Continental firms competing with home makers ? The truth, probably, is that for the purposes of the present comparison the prices of coal and materials at the pits and works in each country may be taken to be about the same ; that here, as abroad, there is great diversity of circumstances ; that in each country some companies, whose railways are near collieries and ironworks, have the benefit of the lowest prices, while others obtain their supplies by sea or rail at an enhanced cost.

The chief item of expense in the working of railways, and that which is of the greatest importance in making any com-

parisons intending to show that railway rates in this country should be reduced, is that of wages; an item of expenditure ignored in the above statement. Here they are generally higher, and the hours of labour are fewer, than in any of the other countries referred to. It is difficult to make an absolutely trustworthy comparison of the actual sums paid in salaries and wages. Different systems of payment exist; the allowances made to the staff on the Continental lines in the way of house rent, &c., and the amounts contributed by the companies to the superannuation and other benevolent funds ought not to be forgotten; such contributions, especially in France, amount in a year to a considerable sum. On the whole, however, we may arrive at an approximately correct estimate by taking the total amounts paid in salaries and wages and the average amount paid per man per year. The following is the percentage of wages as compared with the total working expenses.

¹ England...60·33 per cent.	³ Belgium ..57·92 per cent.
² France ...46·75 ,,	⁴ Holland ...48·57 ,,

1. These figures may not be absolutely accurate, but every effort has been made to make a fair comparison. To obtain them, each of the twelve largest companies, owning in the aggregate 11,538 miles, have supplied the information.

2. The six great companies.

3. The State railways, from the published report.

4. The State, Holland and Dutch Rhenish railways, from information kindly supplied by them.

GERMANY.—The “Statistische Nachrichten Von den Eisenbahnen” shows the expenses for salaries and wages paid by the German railways (exclusive of 38,166,114 marks under the heading of shunting expenses, as it is not known whether this item includes anything for wages) to be 48·46 per cent. of the gross working expenses, but as this information differs from that otherwise obtained, and it is not known whether the latter includes any staff expenses in respect of new works, it is not considered desirable to bas any conclusions on either set of figures until they are verified.

The hours of labour are an element in the matter. We do not go into detail, or endeavour to make a precise comparison. But it will not be disputed that, as a rule, they are fewer here than on the Continental lines. Here, too, there is, comparatively speaking, very little Sunday duty, which is far from being the case abroad. On most of the railways in this country it is the practice to provide at the company's own cost clothing for such of their staff as wear uniform. The Dutch companies also supply some members of their staff with clothing. But in France, Belgium, and, generally, in Germany, the cost of clothing supplied to the uniform staff, which has been omitted in the comparisons, is deducted from their wages by instalments.

For the reasons already stated, there is no small difficulty in comparing the rate of wages per day or per week. Although in this country annual allowances such as bonuses for good conduct are known, wages are, as a general rule, fixed sums per day or per week, increasing according to the importance of duties and service. On some of the Continental railways the allowances are in some instances a considerable percentage of the fixed wages.⁽¹⁾

The following table has been prepared from the best information that could be obtained on the subject, and it may fairly be taken as an approximate estimate of the average wages paid :—

(1) See Note on page 136.

NOTE.—There is a difference between the statements of revenue receipts and working expenses given in the "Statistische Nachrichten Von den Eisenbahnen" and those otherwise obtained, but not of a material character for the present purpose.

GRADE.		ENGLAND.	FRANCE.	GERMANY.	BELGIUM.	HOLLAND.
Engine Drivers	... per day	5/0 to 7/6	4/0 to 4/8	3/3 to 5/0	3/3 to 3/7	3/4 to 4/2
Firemen	... ..	3/0 to 4/6	3/0 to 3/4	2/6 to 3/3	2/0 to 2/5	2/2 to 2/11
Guards, Passenger	... per week	21/0 to 40/0	} 20/0 to 38/6	15/0 to 26/0	18/6 to 34/0	13/0 to 21/0
Guards, Goods	... ..	22/0 to 32/6				
Signalmen	... ..	18/0 to 30/0	18/6 to 32/0	16/0 to 23/0	12/0 to 17/6	14/0 to 22/0
Porters, Passenger	... ..	15/0 to 17/6	} 14/0 to 17/0	16/0 to 20/0	13/0 to 17/6	14/0 to 17/6
Porters, Goods	... ..	18/0 to 24/0				
Shunters	... ..	16/0 to 26/0	14/0 to 17/0	*	15/0 to 29/0 ¹	15/0 to 22/0
Platelayers	... ..	15/0 to 23/0	12/3 to 20/0	12/8 to 14/6	12/0 to 17/6	12/0 to 14/0

* Shunting Masters 20/0 to 26/0. ¹ Includes Foremen.

Passing over the fact that in this country porters to attend to passengers' luggage are provided by the companies, that the class goods rates here include loading and unload-

NOTE.—ENGLAND—On some railways the 1st Class drivers are allowed a premium of £10 a year for good conduct, and both drivers and firemen are allowed lodging money, and also Sunday labour at the rate of 8 hours per day. Signalmen are allowed bonuses for good conduct from £1 to £5 per annum, and guards are allowed travelling expenses from 1/6 to 2/6 per day and night.

FRANCE—Premiums to drivers and firemen are allowed for economy of fuel, regularity of service, and lodging expenses. Guards receive lodging money when they have to sleep out and a percentage on the excess fares collected, amounting together to about £4 15s. a year. Sums varying from £2 to £10 per annum are allowed to the inferior grades of staff who have to reside in Paris and other large towns where living is dear.

GERMANY—The staff are classified into 5 divisions, all of which (except Class 1, which includes Ministers, Presidents, &c., who do not receive allowances), in addition to their fixed wages, receive allowances for house rent, which vary according to the town in which they reside. The towns are also classified into six divisions as under:—

		A	1	2	3	4	5
Staff in Class		£	£ s. d.	£ s.	£ s.	£ s.	£
Do.	2 ...	60	45 0 0	36 0	30 0	27 0	27
Do.	3 ...	45	33 0 0	27 0	24 0	21 0	18
Do.	4 ...	27	21 12 0	18 0	15 0	10 16	9
Do.	5 ...	12	9 0 0	7 4	5 8	3 12	3

Head guards are in the 4th Class, under guards 5th, 1st Class Signalmen 4th, and Porters and shunters 5th. Engine drivers, firemen and guards are allowed expenses when away from home. Porters are not paid by the railway companies, but are allowed to charge the passengers fixed fees.

BELGIUM—Engine Drivers and firemen are allowed premiums for

ing, which they frequently do not abroad, and that, generally speaking, a greater number of men are employed on the railways in this country, there remains the fact, that the difference between the percentage of wages paid on foreign railways, as compared with the total cost of working the railways, and the percentage of wages paid in the United Kingdom is upwards of £4,000,000. There is, moreover, a great difference in the amount paid per person in England, as is shown by the returns of the twelve companies who have supplied the information, viz. :—

				£	s.	d.
England	...	...	...	62	10	0
France	...	...	...	47	12	0
Belgium	...	...	...	41	2	3
Holland	...	...	...	34	3	10

The amount paid per person by the English railway companies, whose lines comprise 11,538 miles, a gross revenue of £52,904,920, and the total aggregate expenses of which amount to £27,731,876, would probably be too high an average for the United Kingdom. Assuming, however, the difference in the amount per person paid in England as compared with the other countries to be an average of

economy of fuel and regularity of working, amounting to as much as £20 a year for drivers and £10 for firemen. Guards are also allowed bonuses for regularity of working.

HOLLAND—Enginemmen and firemen are allowed premiums for economy in fuel, varying from 3d. to 2/- per day; and a mileage allowance in addition. Guards also receive an allowance over a certain number of miles travelled. Porters are not employed by the companies; but in return for the privilege of being allowed on the stations, they clean windows, sweep offices, &c., and perform other services for the companies.

only £10, and that the cost of wages in this country could be reduced to that extent, there would be a saving of about £3,500,000 per annum.¹

So much for the grounds put forward to justify a reduction of rates. Far from proving that working expenses are less on lines in this country, and that this forms grounds for reducing the rates, these figures clearly prove the opposite to be the case.

(¹) The "Statistische Nachrichten Von den Eisenbahnen" shows an average of £39 6s. 5d. per person on the German railways, whereas the other information, referred to at foot of page 133, gives the following average per person :—

Traffic and General Services.				£	s.	d.
Superintendence, Clerks, &c.	...	...	...	76	18	0
Workmen	...	...	...	31	4	0
Workshops.						
Superintendence, Clerks, &c.	...	...	...	95	0	0
Workmen	...	...	...	45	12	0

An average of £53 8s. 0d. per person.

NOTE.—In Great Britain the costly systems of interlocking and signalling, and the block working, so as to interpose between trains an interval of space instead of time, are in operation to a very much greater extent than on the Continent, thus involving a larger staff of trained men.

Rates and Taxes on Railways in England and on the Continent.

A large item in the expenses of railway companies in this country is the amount paid for rates and taxes other than the Government duty. The matter is too important to be passed over in general terms. In the United Kingdom the amount paid by all the railway companies for rates and taxes in the year 1884 was no less than £1,937,691. This is exclusive of Government duty to the extent of £398,577 and of income tax on the net receipts amounting to about £800,000. Including these items the total sum paid for rates and taxes for the year was £3,136,268. In England and Wales alone the amount paid for that year was for

			£
Rates and Taxes	...	...	1,664,660
Government Duty	...	...	369,677
Income Tax (about)	...	...	700,000
			<u>£2,734,337</u>

From the year 1871 inclusive to the end of 1884, the following sums were paid in the United Kingdom for

			£
Rates and Taxes	...	...	19,995,570
Government Duty	...	...	9,313,678
Income Tax (about)	...	...	7,600,000
			<u>£36,909,248</u>

No such payments as these are made to the Governments or parishes by the railway companies in Belgium or Holland, or in respect of the State lines, in Germany. In Belgium, for instance, the railway companies pay no rates and taxes of any kind except small sums to towns for local rates (which amounted in the aggregate to only £1,463 for the year 1884),

and a license duty or income tax to the State of 2 per cent. on the annual profits amounting for the same year to £4,406, a total of £5,874 for the year.

In Germany the whole amount paid by the railways for rates and taxes in the same year was £261,221, together with a State tax of £26,209, paid under the head of "tax on profits," by the independent and semi-independent companies only, and not by the State railways. This made a total for the year of £287,430.

The railway companies in Holland do not pay any rates and taxes, except a license duty to the State of 2 per cent. on the dividends paid to the shareholders. Indeed, Article No. 8 of the Convention of the 24th and 25th May, 1876, for the working of the State railways by the Dutch Company, stipulates that the railways shall be exempt during the period of the Concession, from all Government taxation or payments to towns or parishes.

In France the condition of things is different.¹ Although there is no taxation on merchandise traffic, the payment in respect of passenger and *grande vitesse* traffic, which is added to and levied with, the railway charges, is heavy, and amounted in the year to £4,683,937.

The other taxes paid by the railway companies themselves, or by the holders of shares, &c., amounted to £1,490,415, making together a total for the year of £6,174,352.²

Such are a few of the differences in the position and rights of English and Continental railways, and those who

(¹) See "Aucoc, Cours d'Administration," vol. 3, p. 345.

(²) The taxes in France consist of :—

1. A duty of frs. 23·20 per cent. on passenger fares and *grande*

depreciate the former should explain whether they wish to adopt all the practices of foreign lines—the features unfavourable to traders as well as the advantages, slow transit, very limited liability for loss of goods or damages to them, and exemption from fiscal burthens which English railways bear—and how the cost of working, especially in the item of wages, can be reduced.

vitesse traffic, added to the railway charges, amounting to £3,436,161.

2. A stamp duty of 35 cents. on "*recépissés*" and 70 cents. on consignment notes, also charged in addition to the rates, amounting to £1,116,583.
3. A stamp duty of 10 cents. for every receipt of 10 frs. and above, amounting to £60,328.
4. A charge of 15 cents. for postage of advice note of arrival of goods, amounting to £70,857.
5. A tax of 10 frs. per kilometre for double lines and 5 frs. per kilometre for single lines, plus 5 per cent. on the value of the premises occupied by Agents, and 2 per cent. on warehouses, workshops, &c.
6. License, exoise, stamp, customs, and bond duties.
7. A tax of 120 to 150 frs. per kilometre worked, for the expense of auditing and superintendence.
8. A stamp duty on shares and bonds of 1 per cent. of the nominal capital.
9. An income tax of 3 per cent. on interest and dividends.

SECTION XIV.

HIGH RATES AND THEIR EFFECT ON TRADE.

It is not uncommon to attribute much of the existing depression of trade to rates charged by railways. Before the Royal Commission which lately investigated the subject, many statements to that effect were made. Against their accuracy there is a strong presumption in the fact that trade has been in recent years depressed elsewhere, and in countries supposed to enjoy lower rates than exist here. When particulars of the exact nature of these complaints are furnished—which is seldom done—it is found for the most part that there is no real connection of cause and effect between railway charges and depression in trade; that the latter revives or declines independently of the former; that for the most part, the evils complained of are beyond the power of railway companies to remove; and that the complaints are contradictory. Two of the forms which these complaints have taken may be noted. One is the statement that ⁽¹⁾ differential rates operate in favour of the foreign producer, and that works are being removed from inland to seaboard towns to save carriage. ⁽²⁾ Obviously this grievance could be wholly abated only by free carriage; producers on the sea coast, near points of

⁽¹⁾ Mr. L. Cohen—Debate on Railway and Canal Traffic Bill, 6th May, 1886.—Hansard, vol. cccv., 428.

⁽²⁾ See Second Report, Minutes of Evidence, Mr. Muller, page 38, Q. 1889.

shipment, inevitably possess certain advantages. These again could only be materially reduced by differential rates somewhat lessening the inland producer's geographical disadvantages; and to this remedy the persons loudest in their complaints most strongly object. Another form which such complaints take may be noted. The following extract is from a paper sent in by the Mining Association of Great Britain to the Royal Commission on Trade :—

“The heavy trades of coal and iron are also unduly burdened by “the high rates and tolls charged by the Railway Companies. They “are slowly but surely killing the trade of the country by their high “charges and by the preference given to foreign countries.” ⁽¹⁾

Charges against Railway Companies are, generally, of a vague character. But this statement is sufficiently definite to make it possible to test its accuracy by comparing the rates charged for conveying the articles referred to, viz., iron and coal, to some of the chief ports in this country, with the corresponding rates of other neighbouring countries. The following is a comparison of a few of the rates charged for coal and iron in England with those to Belgian and German Ports :—

(1) Compare Sir Lowthian Bell's statement. “The results of my “enquiry on the continent of Europe, and in the United States, justify “the assertion that foreign iron manufacturers as a rule possess no “advantage over ourselves in these respects . . . That railway “accommodation for the transport of fuel, ore, and limestone is afforded “on terms somewhat cheaper in Great Britain than those charged on “the Continent for like distances.” (*Appendix to part 1 of Second Report of the Royal Commission on Depression of Trade, pages 345-361.*)

COMPARISON OF RAILWAY RATES CHARGED FROM VARIOUS
BELGIUM AND

	Article.	From	To	Rate per ton.	Remarks.
ENGLAND...	Coal	Cwmbran ...	Newport ...	s. d. 0 4½	In owner's wagons.
		Risca ...	Newport (Old Dock) }	0 6	In owner's wagons.
		Flimby ...	Maryport ...	0 6½	In Company's wagons, including tipping.
		Camerton ...	Workington	0 7	In owner's wagons, including tipping.
		Cockett ...	Swansea ...	0 9	In owner's wagons, including tipping.
		Gilgarran ...	Whitehaven	0 10	In Company's wagons, including tipping.
		Dynevor ...	Swansea ...	0 10	In owner's wagons, including cost of shipment.
		Coedcae ..	Cardiff... ..	0 11½	In owner's wagons.
		Mountain Ash ... }	Cardiff... ..	1 0	In owner's wagons.
		Felling ...	Monkwear- mouth Dock... }	1 0½	In Company's wagons, including cost of shipment.
		Abertillery...	Newport (Old Dock) }	1 1	In owner's wagons.
		London- derry Col- liery ... }	Tyne Dock...	1 2½	In Company's wagons, including cost of shipment.
		Burradon ...	„ „	1 4½	In Company's wagons, including cost of shipment.
		Collieries in St. Helen's District ... }	Garston ...	1 5	In owner's wagons, including use of dock and tipping.

**COALFIELDS TO THE NEAREST PORTS IN ENGLAND,
GERMANY.**

	Article.	From	To	Rate per ton of 1000 Kilogrammes.		REMARKS.
				100 tons.	10 tons.	
BELGIUM	Coal	Bascoup ...	Antwerp ...	s. d. 1 7½	s. d. 2 1½	including wagons.
		„ ...	Ghent ...	1 7½	1 10	
		Jemappes ...	Antwerp ...	1 11	2 5½	
		Mons ...	Antwerp ...	...	2 4
		Charleroi ...	Antwerp ...	...	2 3
		Fontaine- l'Évêque...	Antwerp ...	...	2 3
GERMANY	Coal	Piestag ...	Bremen ...	50 tons 3 5	10 tons ...	* For quantities of 200 to 300 tons forwarded per day or by one train, the rate from Gelsenkirchen to Amsterdam is 4/6 per ton, and to Antwerp 5/- per ton.
		Gelsenkir- chen...	*Amsterdam	4 11	5 9	
		„	*Antwerp ...	5 3	6 6	
		Gelsenkir- chen... ..	Hamburg ...	5 7	7 7	
		Group I.				
		Camén, &c.	Bremen and Hamburg.	5 6	7 1	
		Group II.				
		Bochum, &c.	Bremen and Hamburg.	5 7	...	
		Group III.				
		Meiderich &c.	Bremen and Hamburg.	5 8	...	
FRANCE } HOLLAND }	No Coal exported.					

COMPARISON OF RATES FOR

	Article.	From	To	Rate per ton.	REMARKS.
ENGLAND...	Iron(Class A.)	Workington	Whitehaven	s. d. 1 3	In Company's wagons.
		Cwmbran ..	Newport ...	1 4	In Company's wagons.
		Merthyr ...	Cardiff ...	2 2	In Company's wagons.
		Darlington.	Middlesboro'	1 9	In Company's wagons.
		Ebbw Vale...	Newport (Old Dock) }	1 9½	In Owner's wagons.
		Dowlais ..	Cardiff ...	2 7½	In Company's wagons.
		Briton Ferry	Swansea ...	2 6	
		Cwmbran ...	Cardiff ...	2 10	
		Tondu ...	„ ...	3 4	In Company's wagons.
		Darlington	Tyne Ports	3 4	(4-ton lots.) Ditto.
		„	Gateshead ...	3 9	In Company's wagons.
		Tondu ...	Swansea ...	3 9	In Company's wagons.
		Briton Ferry	Cardiff ...	3 9	In Company's wagons.
		Darlington.	Sunderland	3 9	In Company's wagons.

IRON AND STEEL GOODS.

	Article.	From	To	Rate per Ton of 1,000 Kilogrammes.							
				10 tons	5 tons	Under 5 tons		10 tons	5 tons	Under 5 tons	
BELGIUM	Iron	La Louvière	Antwerp	s.d.	s.d.	s.d.	s.d.	Ghent ..	s.d.		
		Charleroi ...	"	3 7	...	...	...	"	3 5	...	...
		Liege	"	3 8 5	18 9	...	...	"	3 8	...	...
		Marcinelle	"	3 9 5	49 9	...	...	"	...	...	...
		10% added	if loaded	3 8	...	...	...	
				in covered trucks							
	Steel in bars and bundles, iron in bars and sheets unpollished, Bandages for wheels, Castings, Rails, Cast-iron Tubes, Nuts, Bolts, Fish-plates, &c.			10 Tons.	5 Tons.			10 Tons.	5 Tons.		
				Open.	Covered.	Open.	Covered.	Open.	Covered.	Open.	Covered.
		Chatelineau	Antwerp	3 8 4	4 5 2	6 9	...	"	3 8 4	1 5 2	6 9
		Marchienne	"	3 8 4	0 5 1	6 7	...	"	3 7 4	0 5 1	6 6
		Acoz	"	6 9 4	1 5 4	7 0	...	"	3 9 4	2 5 4	7 0
		Seraing ...	"	3 10 4	3 5 5	7 3	...	"	4 1 4	6 5 8	7 9
		Thy-le-Chateau	"	3 9 4	2 5 4	7 2	...	"	3 10 4	2 5 4	7 1
		Athus	"	4 11 5	4 6 5	...	...	"	4 11 5	6 6 7	...
				10 tons	5 tons			10 tons	5 tons		
	Anchors and Cables, Carriage brakes, Springs, boilers, Ironmongery, &c. &c.	Clabeg ...	"	4 3 5	4	...	...	"	4 4 5	6	...
		Tubize ...	"	4 3 5	4	...	...	"	4 3 5	4	...
		La Louvière	"	5 0 6	4	...	...	"	4 8 5	11	...
		Monceau-sur-Sambre	"	5 0 6	6	...	...	"	5 0 6	5	...
		Marchienne	"	5 1 6	7	...	...	"	5 1 6	6	...
		Chatelineau	"	5 2 6	9	...	...	"	5 2 6	9	...
		Acoz	"	5 4 7	0	...	...	"	5 4 7	0	...
		Liege	"	5 4 7	0	...	...	"	5 8 7	8	...
		Angleur ...	"	5 5 7	2	...	...	"	5 8 7	9	...
		Seraing ...	"	5 5 7	3	...	...	"	5 8 7	10	...
		Thy-le-Chateau	"	5 5 7	2	...	...	"	5 4 7	1	...
		Tilteur ...	"	5 5 7	2	...	...	"	5 8 7	9	...

COMPARISON OF RATES FOR IRON AND STEEL GOODS—continued.

	Article.	From	To	10 tons.	5 tons.	Under 5 tons.	REMARKS.
				Open.	Open.		
HOLLAND	Iron Rails, Bar, Steel, Iron, &c.	Gouda ...	Rotterdam	s. d.	s. d.	s. d.	Excluding loading and unloading.
		"	"	...	2 0	...	Including ..
		Haarlem ...	Amsterdam	...	2 0	...	Excluding ..
		"	"	...	...	3 4	Including ..
		"	Rotterdam	...	3 6	...	Excluding ..
		"	"	...	...	4 2	Including ..
		Utrecht ...	Amsterdam	...	2 4	...	Excluding ..
GERMANY	Iron (Bar, Sheet, Coarse Iron and Steel Goods Tin Plates, Galvanized Iron Wire, &c.)	"	"	...	...	4 4	Including ..
		Peine ...	Bremen	10 tons.	5 tons.	Under 5 tons.	
		Oberhausen	Amsterdam	6 8	9 1	19 5	
		Dortmund ...	"	5 4	10 4	16 6	
		"	Bremen	6 4	11 0	20 11	
		Oberhausen	"	6 5	13 1	23 1	
		Dortmund ...	Rotterdam	6 11	14 0	30 2	
		Cologne	Antwerp	6 7	...	...
		Dusseldorf...	Antwerp	7 6	...	...
		Benrath	"	8 5	...	...
		Duisbourg...	"	8 10	...	...
		Schwerte	Bremen	9 4	...	...
		Essen	Antwerp	6 6	...	...
		Schalke	"	9 10	...	...
		Herdecke	Bremen	10 0	...	...
		Bochum	Antwerp	6 8	...	...
		Haspe	Bremen	10 4	...	...
		Herdecke	Hamburg	6 10	...	...
		Dortmund ...	Antwerp	9 1	...	...
		Schwerte	Bremerhafen	11 0	...	...
		Bochum	"	7 11	...	...
		Schwerte	Hamburg	8 2	...	...
		Essen	"	8 11	...	...
		Haspe	"	9 2	...	...
		Osnabruck...	Antwerp	9 2	...	...
		Dillingen	Bremerhafen	14 7	...	...
		Castrop	Stettin	15 3	...	...
		Burbach	Bremerhafen	15 10	...	...
		Brebach	"	16 0	...	...
		Herdecke	Stettin	16 0	...	...
		Essen	"	16 2	...	...
		Dillingen	Hamburg	16 4	...	...
		Duisbourg...	Stettin	16 5	...	...
		Nerdlingen...	"	16 8	...	...
		Hanover	Antwerp	17 4	...	...
		Rothe Erde	Stettin	18 0	...	...
		Neunkirchen	"	19 6	...	...
		Burbach	"	20 2	...	...
		Dillingen	"	20 8	...	...
		"	"	21 4	...	...
FRANCE ...	No export	traffic.					

NOTE. The truck load rates are for open trucks. Extra is charged for tarpaulins if the goods are required to be covered.

Such figures are a conclusive answer to charges of the sweeping character we have quoted. They are a warning of the peril of generalizing from a few hastily collected local instances. The owners of some inland collieries and manufactories, not so favourably situated as their rivals, might have reason to complain—there would be plausibility in the statements we have quoted—if English coal and iron were inferior to foreign, and could not bear the same charges as foreign products, or if collieries and iron works, near the sea, were unable to supply more coal and iron than they now do. Neither supposition is true. The house and steam coal raised at some of the English collieries named in the foregoing tables is probably the best in the world. The iron and steel are equal, if not superior, to any produced; and the districts in which the collieries and works are situated can (if only there were the demand, which, unfortunately, there is not) produce much more than they do. In these circumstances, with rates so favourable as those which are quoted, there appears to be absolutely no ground for the crude allegation that railway rates are the cause of the diminished exportation of either coal, iron, or steel.¹

As regards the conveyance of minerals and goods, there is no sign of decline of trade, far less that it is “slowly, but

(¹) The inflated prices charged in 1873-4 led to the establishment of new collieries in Glamorganshire and Monmouthshire, which raise about 6,000,000 tons per annum; this, with the increased output of the then existing collieries, is equal to an increase of about 50 per cent. of the previous tonnage raised in these counties which, with about 30 per cent. increase in other parts of the country, has prevented colliery proprietors obtaining a reasonable profit since 1875, and probably will do so until the demand overtakes the supply.

surely killed by high rates and tolls." Taking three tests: receipts from minerals and goods, tonnage conveyed and amount produced—it will be seen that the figures stated in Appendix II. indicate no decline. The volume of trade is larger, lower prices may rule; but this will scarcely be attributed to the action of rates.

Even when foreign rates seem lower, the difference is often more apparent than real. With few exceptions the English rates for merchandise traffic include the charges for loading and unloading, collection and delivery, and all the other services connected with conveyance. On the other hand, the foreign rates are exclusive of collection and delivery, and of the various other services of booking, weighing, advising, stamping freight note, &c., and also of the cost of loading and unloading, except in the case of part loads in Belgium, where the rates include compulsory charges for loading and unloading.¹

In judging of the effect of rates in encouraging foreign competition, one circumstance must not be lost sight of. If railways in this country do not carry all species of merchandise traffic at as low rates per ton per mile as some of those charged on railways in countries where, not only has the cost of construction been less than here, but where the lines are owned or subsidised by the State, such a fact is not conclusive. To determine how far rates charged in this country really affect the ability of manufacturers to compete with foreign rivals, the charges per ton per mile must not alone be considered. The *gross rate per ton* from the place of production to the port of export is important. A

(¹) See Appendix I., page vii.

manufacturer cannot fairly say that he is prevented from competing with his foreign rivals by rates less in the aggregate than those paid by the latter. Otherwise one whose works were situated within 20 miles of a seaport, and who paid $1\frac{1}{4}$ d. per ton per mile for the conveyance of his goods, might with equal justice say that he could not compete with another manufacturer whose works were 50 miles from the port of shipment, and who paid only a 1d. per ton per mile. 2s. 1d. is less than 4s. 2d., however the sums may be made up. Now, such superiority of situation English manufacturers, as a rule, must from the nature of things enjoy. A glance at a map will show that in England no such distances have to be traversed to get to the seaboard as in Germany, France, and, in some instances, Belgium. In England there is no place 100 miles distant from the coast, and so numerous are the ports, and so near to them, - relatively speaking, are the great coal districts and centres of other industries and manufactures, that producers of coal are more favourably situated, and other producers are, in general, more favourably situated than those on the Continent, especially as compared with those of France and Germany. To illustrate this fact, a few examples of various manufacturing centres may be given.

Places of Production.		ENGLAND.							HOLLAND.			
		PORTS.							Places of Production,		PORTS.	
		Liverpool.	Hull.	Grimsby.	Goole.	Fallow.	London.	Bristol.			Amsterdam.	Rotterdam.
Hardware, Cutlery, &c.	Birmingham Sheffield	97 73	...	...	112 30	...	111 161	90	Hardware	Gouda	Mi	lea.
Agricultural Machinery	Ipswich...	...	...	...	...	...	...	21	Manufactured Iron Goods and Machinery	Haarlem	...	43
Cotton, Woollen, Drapery, and Cloth Goods	Manchester...	31	90	...	68	88	183		Cotton, Woollen Goods, &c.	Utrecht...	...	33
	Leeds ...	76	51	90	38	94	186			Elburg...	...	44
	Bradford ...	71	...	...	82	44	85	191		Deventer	...	95
	Trowbridge ...	...	...	...	...	...	...	24		Hengelo	...	113
										Enschede	...	114
										Almelo	...	116
										Oldenzaal	...	1120
										Amersfoort	...	47
										Leiden	...	24
										Eindhoven	...	67

Places of Production.		FRANCE.							BELGIUM.			
		PORTS.							Places of Production.		PORTS.	
		Treport.	Havre.	Dunkirk.	Boulogne.	Rouen.	Dieppe.	Honfleur.			Antwerp.	Ghent.
Cotton, Woollen, Velveteen, Drapery, and Fancy Goods.	Amiens ...	51	...	...	76	...	...	...	Hardware	Acrz...	Mi	lea.
	Roubaix ...	...	...	56	...	...	...	...	Cutlery and Agricultural M'ch'nry, &c.	Clabecq	...	45
	Tourcoing ...	...	...	58	...	...	...	...		Chatelineau	...	69
	Paris ...	142	119	166	83	103	143	184		Marchienne	...	64
	St. Quentin	108	...	126	131	...	...	...		Angleur	...	76
	Rheims ...	...	...	...	176	...	...	...		Louvain	...	61
	Elbeuf ...	...	55	...	...	...	...	...		Liège	...	95
										Tubize	...	44
										Charleroi	...	68
										La Louvière	...	53
										Monceau-sur-Sambre	...	63
										Verviers	...	110
										Dinant	...	90
										Loth...	...	43
										Courtrai	...	30
										Alost	...	18

	Places of Production.	GERMANY.							
		Ports.							
		Bremen.	Hamburg.	Bremerhafen.	Stettin.	Antwerp.	Amsterdam.	Rotterdam.	Gustavsburg.
		Miles.							
Hardware, Iron, Steel, Goods, Cutlery, &c.	Dortmund ...	147	217	186	381	164	143	153	141
	Essen ...	158	227	196	403	147	124	133	180
	Solingen ...	190	259	229	424	144	156	165	154
	Oberhausen ...	159	229	197	412	141	116	126	174
	Dillengen ...	359	428	387	566	262	307	304	137
Agricultural Machin- ery and other Ma- chinery	Dusseldorf...	179	246	217	425	124	136	145	157
	Strasbourg...	449	490	487	563	304	384	381	156
	Vienna	632	619	670	496	745	759	759	300
	Darmstadt ...	311	361	349	440	278	305	302	19
Cotton, Woollen Goods, &c.	Elberfeld ...	176	245	214	409	142	153	161	160
	Barmen	173	242	211	406	144	154	163	162
	Berlin	187	178	234	84	485	394	414	289
	Orefeld	184	263	222	435	117	122	130	163

Such natural disadvantages foreign countries have, by special rates, sought to diminish, but they cannot be wholly effaced.

It is a curious circumstance that in the discussion of the problem of railway rates on the Continent, wholly different language is employed with reference to English railways. Here, it is common to hold up foreign railways as models of cheapness and efficiency; there, in the discussions which have taken place in France and Italy on the same subject, the opposite course has been pursued. English railways have been extolled as worthy of imitation; they have often been, praised for the very qualities in which it has been alleged in recent discussions that they are wanting. Can both views be right? Is not this depreciation of home railways, this vague praise of foreign lines, sometimes an

example of a common artifice of controversy? Is it not often an illustration of the tendency to treat *omne ignotum pro magnifico*? Very different from this loose, unverified deprecation is the opinion of those foreign observers who have carefully examined the question. This might be illustrated by many official documents; but the following quotation from a report of M. Richard Waddington to the Chamber of Deputies may suffice:—

“Comparison between the French and foreign rates has often been made in Parliament, and the defenders of our tariff have presented it as favourable to our French companies; but this comparison can only justly be made, provided the conditions of delay and distance are taken into consideration. Now, in England, the delays are extremely short, merchandise which leaves Manchester in the evening being delivered in London next day, slow goods trains hardly existing, and the consignee placed rapidly in possession of his goods, avoiding the loss of interest which, under the French system, tends to increase the amount of charges. On the other hand, in view of a well-known principle, the longer the distance the lower the charge per kilometre, but the average distance of 135 kilometres (84 miles) in the French system is greater than the average distance travelled on the railways of Great Britain, of Belgium, and of Alsace-Lorraine. From the figures which have been already quoted, and the documentary evidence which we attach, we are led to conclude that the conditions and rate of carriage of merchandise in France are less favourable than those by which our nearest neighbours are benefited; therefore, far from being able to share the optimistic view to which we have already alluded, we fear that we can only report that the comparison is really unfavourable.”⁽¹⁾

Such facts are familiar to foreign merchants and traders; and it might be well in future discussions of the comparative merits and efficiency of English and Continental railways, to gather information as to the latter from

(1) *Appendix 31 to Report from Select Committee on Railways (Rates and Fares)*, 1881-2, Vol. II.

persons who are conversant with their working, and not from those who can know them only imperfectly and indirectly, and who may have an interest in praising them to the disadvantage of the former.

If high rates impede the progress of trade it must be by raising the prices of commodities, and so diminishing the demand for them, or by seriously reducing the profits of producers. Have those who complain of the effect of rates on prices established the existence of either of these results? They have had before them, as a rule, only a few special instances of unfavourable rates. They have ignored the mass of cases in which the charge for conveyance is a trifling element in price. They have not, as would be but fair, taken a large group of articles, and noted how insignificant is the cost of transport as compared with other charges, how small is the rate of profit of the railways as compared with the charges of the manufacturers and distributors. Here it is not right to stand merely on the defensive; we are well warranted in saying that if, fortunately, trade is not more depressed than it is, we owe this in no small degree to the efficiency of the railway system which has aided the manufacturer and producer in their difficulties. Economists are agreed that wages and salaries must bear some relation to cost of living, and must eventually rise if that becomes permanently dearer. Everywhere, but in great towns especially, railways have prevented the rise in the cost of provisions. They have made it possible for people to obtain food from great distances at low prices, and thus for employers to obtain labour at prices which might not have been possible but for the cheapness of provisions. The few figures given in the following table may be instructive:—

FRESH MEAT is carried to London from :—

		Distance. Miles.	Rate per ton.	Rate per stone of 8 lbs. d.	Rate per lb. d.
Aylesbury ...	...	42	20/- C. & D.	0·857	·107
Grimsby ...	...	154	40/-	1·714	·214
Castle Cary ...	...	120	40/-	1·714	·214
Norwich ...	...	115	40/-	1·714	·214
Ipswich ...	...	70	29/2	1·250	·156
York ...	...	188	55/-	2·357	·295
Aberdeen ...	...	516	67/6	2·893	·362
Stromness ...	...	776	90/-	3·857	·482

POTATOES (Old), CARROTS, PARSNIPS, TURNIPS, are carried to London from :—

		Distance. Miles.	Rate per ton, 8 to 8.	Rate per cwt. d.	Rate per lb. d.
Banbury ...	...	76	8/9	5½	·047
York ...	...	188	15/-	9	·080
Salby ...	...	174	13/4	8	·071
Chippenham ...	...	94	10/10	6½	·058
Aberdeen ...	...	516	30/-	1/6	·160
Sunderland ...	...	269	18/4	11	·098

GREEN VEGETABLES are carried from Cookham to London, 27 miles, at 11/8 per ton, C. & D. in one ton lots, or 7d. per cwt.

BACON is carried from Calne to London, 99 miles, in one ton lots at 22/6 per ton ; 1/1½d. per cwt., or ·12d. per lb.

CHEESE is carried from Chippenham to London, 94 miles, at 27/6 per ton, 1/4½ per cwt., or ·147d. per lb. ; and from Cirencester to London, 95 miles, at 23/4 per ton, 1/2 per cwt., or ·125d. per lb.

MILK is carried from Shrivenham to London, 72 miles } for 1d. per im-
 „ Swindon „ 77 „ } perial gallon.

FISH is carried to London at the following rates (per lb.) :—

Description.	WICK. 740 Miles.		WHITBY. 244 Miles.		GRIMSBY. 154 Miles.		
	By Passenger Train.	By Goods Train.	By Passenger Train.	By Goods Train.	By Passenger Tr. In.	By Goods Train.	
Class 1.—Cured Cod, Ling and White Herrings in brine ...	d.	d.	d.	d.	d.	d.	minimum 1 cwt.
Class 2.—Cured Red Herrings and all other salted or dried fish (except Cod and Ling) ...	...	0.27	...	0.16	...	0.14
Class 3.—Crabs, Fresh Cod, Ling, Haddocks, Whiting, Skate, Halibut, Mackerel, Plaice, and Coal Fish; Eels, Flounders, Sprats in any state	...	0.29	...	0.21	...	0.18	The rates for classes 1, 2, 3, and 4 include collection and delivery. The rates for classes 3a, 4a, and 5, are S. to S.
Class 3a.—Ditto ditto	0.43	...	0.21	...	0.18		
Class 4.—Salmon (in boxes) and Soles, Oysters, Lobsters, and Shellfish, not otherwise classified ...	...	0.40	...	0.29	...	0.25
Class 4a.—Ditto ditto	0.54	...	0.29	...	0.25		
Class 5.—Fresh Fish of all descriptions, not otherwise classified ...	0.70	...	0.29	...	0.25	...	

We now touch a question which comprehends most of those already discussed. When it is stated, as it often is, that the rates charged by the railway companies in this country are generally too high, what exactly is meant? Is it contended that shareholders should be content with smaller dividends than they receive? Let us note the facts.

The average dividend in the year 1884 was only 4½ per cent.; in 1844 it was considered by the Legislature that, at least, 10 per cent. should be earned by the shareholders. In the United Kingdom the average rate of dividend paid during the last 14 years on the capital expended on the construction of railways—which, as already shown, was, at the end of 1884, £801,464,367, and in England and Wales £665,055,379—was only 4·38 per cent. For the year 1884, out of a total of £298,980,000 of ordinary capital, £48,000,000 paid no dividend at all. As an illustration of the moderate return on the shareholders' capital, it may be mentioned that the Great Western Railway Company, which owns, or jointly owns, 2,496 miles of railway, has during the last 30 years only paid an average dividend of £3 15s. per cent. per annum.

The meaning of the statement cannot be that, as compared with the dividends of other industrial companies, those of railways are too high. The facts are all the other way.

If a comparison is made of the percentage on capital earned by Banks, Insurance, Gas and Water Companies, some of which possess monopolies in a strict legal sense, and not merely in the loose popular acceptance of the word, as applied to railways, it will be seen that these returns are far in excess of those derived from railway capital; that not only is the average dividend, but the maximum dividend higher, and that there are fewer instances of shareholders obtaining no returns. Upwards of sixty Banks pay dividends ranging from 10 to 15 per cent., and twenty from 15 to 20 per cent.; thirty-four Insurance Companies pay from 10 to 15 per cent., and twenty-three over 15 per cent.;

and ninety-three Gas and Water Companies pay dividends ranging from 5 to 15 per cent. The average dividends of Banks are 11·83 per cent., of Insurance Companies 12·45 per cent., of Gas Companies 10 per cent., and of Water Companies 5·73 per cent. In face of the above figures, and of the prospects which were held out to those who invested the capital with which the railways have been constructed, it will probably not be directly contended that the present dividend of less than $4\frac{1}{2}$ per cent. is a sufficient return on railway property. Nor is such an income fixed. There is no inconsiderable uncertainty affecting the income and the net return from the working of railways.

It is alleged that the railway system is not properly managed, and that in some way—how it is rarely explained—the railways might be more profitably worked; that even if considerably reduced rates were charged, as good, or a better, dividend might be earned; or that as a consequence of reducing rates such additional traffic would be carried that the loss would be more than covered by the increased trade. Now, no doubt undue competition between companies exists. The largest possible amount of net revenue is not always obtained. But such an admission affords little encouragement. Here something more than vague general statements are needed; it is incumbent on those who call for a great change to produce facts justifying an expectation that, consistently with a reasonable dividend, a considerable reduction can be made in the rates for merchandise. No attempt has ever been made to show that this can be done, and experience is against it. The most plausible argument is, that by reducing rates the present trade would be considerably increased, that new sources of traffic would be created, and

that the companies would be more than recouped the loss which they would sustain by any falling off in the receipts on their traffic. This prospect was held out by the late President of the Board of Trade in introducing the Railway and Canal Traffic Bill. He justified his expectations by stating that the companies who had adopted a cheap passenger system, had reaped great advantages therefrom. Few of them will consider this illustration to be fortunate. Even, however, if the result of the changes in passenger fares had been generally as beneficial as Mr. Mundella seems to have supposed, no comparison can be drawn between carrying a greater number of passengers in trains only partly filled, and conveying additional mineral and goods traffic by trains which must necessarily entail additional mileage and all the attendant expenses. Take, for instance, coal carried at 50d. per ton per mile and that the rate is reduced to 45d.; that is a reduction of 10 per cent. in the rate. Assume a train of 240 tons and 1s. 6d. per train mile each way—that is for the loaded and return empty wagons—as the average cost of haulage and maintenance of way, it would require an increase of 16·6 per cent. in the traffic, to leave a railway in the same position as it was before.

The result of such a course as is recommended would be, to say the least, problematical, as the suggested reasons for it are not unknown to the managers of railway companies, and have been carefully considered by them.

SECTION XV.

PROPOSALS FOR FIXING RATES BY RAILWAY COMMISSION
—CONCILIATION COURTS.

ONE of the many proposals for fixing, or controlling rates was contained in a clause in the Railway and Canal Traffic Bill of last session. It was intended to confer on the Board of Trade the power at any time, "on the application either of a railway company, or of any Local or Harbour Board, any Council of a City or Borough, any representative County body which might hereafter be created, and Justices in Quarter Sessions assembled, any Public Local Authority which is now or might hereafter be established, any Association of Traders or Freighters, or any Chamber of Commerce or Agriculture, who should obtain a certificate from the Board of Trade that they were entitled to make such application, to revoke, amend or vary the maximum rates." This would have been a totally new departure in legislation. Such statutes as the Railway and Canal Traffic Act of 1854, and the Regulation of Railways Act, 1873, exhibit an inclination on the part of Parliament to jealously limit the powers granted to the companies. The tendency of the Courts of Law has been to construe the Acts strictly against companies and give the public the benefit of all doubtful points.¹ But it had never

(¹) See the language of Lord Penzance in *Pryce v. Monmouthshire Canal and Railway Company*, L. R. 4 A. C., p. 206.

before been supposed that the powers to charge the rates and tolls contained in the original Acts, under which the com-

NOTE.—The following remarks, contained in the report of the Joint Committee of 1872, on the subject of periodical revision of rates, are worth reading—

“ The difficulty has been felt by many of the witnesses, and they
“ have accordingly suggested that there should be a periodical revision
“ of rates and fares.

“ Here, again, we are met in the first instance by the same diffi-
“ culty as before. The companies will, if experience is any guide,
“ constantly, for their own sakes, charge less than their legal maxima.
“ Is this revision to take effect on their legal maxima, or on the
“ actual rates as they voluntarily reduce them? If the former,
“ its results will be small; if the latter, it will be difficult to effect,
“ and may bear hardly upon the companies in stereotyping a temporary
“ or experimental reduction. In fact, the proposals for revision of
“ rates, if they are to be effectual, really presuppose some such deter-
“ mination of rates according to a fixed standard as we have considered
“ above. If there are no special rates, it is a comparatively simple thing
“ to make a general reduction. If there are special rates it becomes a
“ very difficult task. But a still more serious question with respect to
“ periodical revision is the question—On what principle is it to be
“ performed, and by whom? If it is to be purely arbitrary, if no rule
“ is to be laid down to guide the revisers, the power of revision will
“ amount to a power to confiscate the property of the companies. It
“ is not likely that Parliament would attempt to exercise any such power
“ itself, still less that it would confer such a power on any subordinate
“ authority. Accordingly the witnesses have suggested that the
“ revision should take effect under conditions which would reserve to
“ the companies a reasonable amount of profit, and to some revision
“ founded on this principle, it appears from the evidence that some, at
“ least, of the principal railway companies would not object.

“ This leads to the further consideration of the important question,
“ whether it is possible or desirable to fix by law a maximum of profit, or
“ dividend. If it is not possible or desirable to do so, any periodical or
“ systematic revision of charges by any authority subordinate to
“ Parliament, may be pronounced impracticable.”

panies undertook the construction of the railways, could be indefinitely altered, as proposed in the above clause. No such recommendation was made by the Railway Rates Committee of 1882. After what took place in the discussion of the Bill, both in Parliament and out of it, and the announcement of the then Attorney General, "that no one contemplated a perpetually recurring revision,"—which the clause provided for—it is not probable that any such suggestion will again authoritatively be made.

Another proposal of a somewhat similar character is, that the Railway Commissioners, or some other special tribunal, should fix the rates. Were a Court for the control of rates established with the consent of all concerned, there would remain the question on what principle are the rates to be framed? Are they to be according to equal mileage, or, if not, in what other manner? What better mode can be suggested than the past practice, which, as has been shewn, has been beneficial to the community? Nor is it easy to understand how any Court could fix all the incalculable number of rates, and hear and determine all the practical questions certain to arise. Even if a trifling proportion of the rates were fixed in this manner, and the task in those cases were performed, with reference to all the many circumstances now governing rates, complications and difficulties must arise, and the Court would be placed in a position of great, if not insurmountable, difficulty. So many anomalies must be authorised that it would be impracticable for the Court to decide consistently with precedents. In all probability the control would either become nominal, or the whole system would have to be recast. Nor must the serious loss of time by the staff of

railways in attending to such inquiries, and the consequent diminution of the efficiency of their work in the actual regulation and conduct of railway traffic be lost sight of. The costliness of inquiries before such a Court is a secondary, but not an unimportant, matter. In the hope of obtaining reduced rates, or of compelling a company to raise the rates of a competitor in trade, or to raise the rates to and from competing ports, some traders and merchants, separately or combined, might risk the expense of applications to such a Court.¹ But the general interest could not be promoted by the creation of any such arbitrary and anomalous Court.

Reference is often made to the experience of the United States in regard to the supervision of railways as if it should be a guide to us. There each State may legislate with reference to the construction and regulation of its own railways. At first everything was done to facilitate their construction. They were proceeded with in advance of, or concurrently with, immigration and settlement. Many States have made large grants of land to railway companies. In some States a few individuals, from five upwards, may form themselves into a railway company, and under general laws construct railways between any two places, regardless of the wishes of others and the considerations which here form the subject of Parliamentary inquiry. No scale of maximum

(¹) In the case of the application of the North Wales Colliery proprietors to the Railway Commissioners against the Great Western Railway Company, on the ground that they charged coal from South Wales to Birkenhead, 159 miles, at the rate of .454d. per ton per mile, as against .893d. per ton per mile for their coal for 28 miles, the expense incurred by the Great Western Company, exclusive of the time occupied by their own staff, was £1,433; and the time which was taken up in preparing for, and in attending, the hearing was very serious.

rates, as a rule, governs the charges for conveyance ; and great variations in them are in fact made. Only, however, in recent times, when railways have become numerous and their extension is not so urgently needed, have State Legislatures interfered with their management.¹

The expediency of establishing maximum rates has been discussed in some States. But another course has also been tried ; Commissioners have been appointed for the purpose of fixing reasonable charges. Where maximum rates have been fixed, in no case, so far as can be ascertained, have the Legislature altered, or the Commissioners interfered with the powers conferred if the rates charged are within such maximum. Some of the Commissioners fixed rates on so unremunerative a basis as to defeat their object and to prevent the introduction of capital, and the construction of railways. The result was that in one State after a trial of about two.

(¹) The rates for "interstate" traffic in the United States are not at present subject to any Government control, but are made at the discretion of the companies to meet the requirements of trade, competition by rail and water, and of cities. Two Bills for the regulation of the interstate traffic of railways have recently been before Congress ; one, the "Reagan" Bill, which proposes to fix the charges, to prohibit any discrimination, and to make it illegal for railway companies "to combine or to pool" their receipts without stringent provisions and penalties. The other Bill, entitled the "Cullom" Bill, proposed the appointment of an Interstate Commission consisting of five members, but did not provide for any specific or maximum rates for the transportation of passengers or merchandise, except that they should be reasonable and that there should be no unfair discrimination ; while laying down the principle that the rates should be in proportion to the distance carried, it proposed to give to the Commissioners power, in their discretion, to allow lower rates to be charged for long, as compared with short distance traffic. The former Bill passed the House of Representatives and was rejected by the Senate ; the "Cullom" Bill passed the Senate, and was rejected by the House of Representatives.

years, the law establishing such a tribunal was hastily repealed.

The rates charged in the United States are mainly governed by competition with water carriage, or between the companies themselves. Occasionally they are so reduced over large districts as to be totally unremunerative. As soon, however, as the struggle between competitors is ended, and

(¹) Report of the Committee of Commerce, House of Representatives of the United States, March 8th, 1886.

"The Committee on Commerce, to whom was referred the bills (H. R. 309) to establish a Board of Commissioners of interstate commerce, and for other purposes; (H. R. 770) to regulate interstate commerce through a national court of arbitration (H. R. 1,572) to create an interstate commerce commission, and to regulate its powers and duties; (H. R. 1,669) to establish a bureau of transportation in the Department of the Interior; (H. R. 2,412) to regulate interstate commerce and to prevent unjust discriminations by common carriers; and (H. R. 3,929) to establish a Board of Commissioners of interstate commerce, and to regulate such commerce, beg leave to report said bills back to the House, and ask that they be laid on the table, and to report the accompanying bill as a substitute for H. R. 2,412, and recommend its passage.

"The subject matter of these bills has been so fully and elaborately discussed for several years past, that it is not deemed necessary in this report to enter into an elaborate explanation of the provisions of the bill reported to the House. You committee may state, however, that the several bills referred to them rest upon three different theories.

"House bills 309, 1,572, 1,669 and 3,929 are framed upon the idea of providing a governmental commission, and of making detailed regulations of freight rates. The theory of these bills did not need the approval of the committee.

"House bill 770, 'To Regulate Interstate Commerce through a National Court of Arbitration,' looks to the establishment of a court with power extending in some measure to the regulation of commerce between States, with provisions extending to the regulation of subjects not believed to be within the jurisdiction of Congress, and not embracing in its provisions matters of regulation believed to be necessary in a bill of this kind; and a single court to be held at Washington City, as provided in this bill, would not be sufficiently convenient to the people.

"The bill which we report to the House, and which is an amendment of House bill 2,412, is based upon the theory of furnishing civil remedies in the courts of ordinary jurisdiction to parties for the most conspicuous grievances complained of in railroad management, prohibiting what should not be done, and commanding what should be done; proposing remedies for the violation of its provisions, and avoiding any attempt at detailed regulation of freight rates. This was deemed best as the first effort at legislation upon this subject. The interests involved are so large, and their successful management so important to the country, that it was not deemed advisable to run any risk of embarrassing the management of the railroads of the country, and at the same time it was deemed necessary for the protection of the

an arrangement is arrived at, the rates are suddenly raised. The circumstances of England and the United States are so unlike that, even were those tribunals suited to the latter, no case would be made out for establishing here a Court

" interests of the people to control and circumscribe the exercise of the monopoly powers of these corporations, to prevent them from making extortionate charges and unlawful exactions upon the people.

" The examination of this subject will show that the attempt to establish a system of legislative rates is impracticable, for the reason that what would be a reasonable rate for one road would be ruinous, perhaps, to others, as the charges for the transportation of freights are largely controlled by the amount of business done by the several roads.

" For instance, what would be a reasonable rate of charges on the Pennsylvania Railroad would not be a reasonable rate upon a road in the new States and in a sparsely settled portion of the country.

" The same difficulty lies in the way of attempting to protect the people by the adoption of maximum rates. What would be a reasonable maximum upon one road would not be reasonable upon others. A maximum high enough to protect the railroads against harm would be too high to benefit the people on most of the roads, and a maximum low enough to protect the people on some roads would be ruinous to the interests of many other roads, so that it is not believed best to attempt to protect the interests of the public by the legislative rates or by the maximum rates.

" The bill which we report to the House, instead of adopting either of these plans, provides that the charges of the railroads shall be reasonable; that persons engaged in the transportation of interstate commerce by railroads shall furnish without discrimination the same facilities for the carriage, receiving, delivery, storage and handling of property of a like character, and shall perform with equal expedition the same kind of services connected with contemporaneous transportation.

" These constitute a portion of the leading features of the bill which we report to the House. It is believed that the enactment and enforcement of such a law will provide for the just and necessary abridgment of the monopoly powers of these corporations, and protect the people against unreasonable charges and extortionate exactions, and will at the same time not interfere with or embarrass the management of railroad corporations in anything which it is reasonable and just they should do. And the Committee believe it wiser and better to provide for the enforcement of the provisions of such a law through the instrumentality of the ordinary courts of justice, and by the judges and juries of the country than by the orders of a commission. The machinery of the courts is already in existence, and will require no additional expense, and is within convenient reach of the people everywhere, and is fully able to adjudicate all cases which may arise under this bill and by methods with which the people are familiar, while no plan of a commission which has been proposed could be conveniently accessible to all the people, and if a plan should be presented which would provide a jurisdiction convenient to all the people it would necessarily be cumbersome and very expensive. In this view a commission is unnecessary, unless it is the purpose of Congress to enter upon the detailed regulation of freight rates."

armed with such powers. Here railway companies can make charges only within their statutory maxima ; there, as a rule, no statutory maxima, or prohibitions of undue preference, similar to those enacted here, are known. Here no municipalities have largely subscribed to the capital of railways, no grants of public lands have been made to them, as have been freely done there.¹

To legislation in Continental countries as to the fixing of rates, we only briefly refer ; in Appendix III. are full details as to the law on this subject of Prussia and the German Empire. It may, however, be here observed that the Prussian General Railway Law of 1838 provided for a reduction of rates when the net profits exceeded 10 per cent ; that the concessions to private companies stipulate for the control of the Government over rates ; but that, in recent concessions, greater freedom is accorded to the companies, which may, within certain maximum limits, modify rates at pleasure. Such legislation is well worthy of attention ; only it may be suggested that it is not reasonable to pick out for commendation this or that provision without regard to its concomitants—to propose to adopt provisions to the disadvantage of railways, and to ignore those which recompense them.

In Germany exist District Consultative Councils or

(1) Poor's Manual of Railroads for 1885 (page xv.) gives a list of Railroads of the United States sold under foreclosure. The following is a brief summary :—

	Mileage.	Capital Stock.	Funded Debt.	Floating Debt.
	m.	\$	\$	\$
1882 ..	668	20,751,457	23,999,065	10,073,769
1883 ..	1,190	24,587,704	38,197,926	2,481,608
1884 ..	714	12,894,000	13,061,000	422,533

Conciliation Courts, which deal with all questions relating to conveyance of goods on railways, and with the application of existing tariffs and the introduction of new local tariffs. It has been stated that those Councils or Courts are of great practical utility. Whether this be so or not the circumstances under which Conciliation Boards are appointed in Germany are very dissimilar to those of the railways in this country. Their constitution is peculiar; similar elements do not exist here. These Boards are composed of representatives of the Government as workers of the railways and representatives of the traders as users of them. Both, however—the nominees of the Government and the traders—may be said to represent the owners (in reality—the public) of 85 per cent. of the lines, who are liable for any loss in working them. In this country neither the Government nor the traders are the owners.¹ Moreover, in Germany the representative of the Government which controls the working of the railways, has, in fact, the power of fixing any rate by his final decision, whatever may be the views of the traders or the Conciliation Boards. In the last resort the owner of the lines controls the rates.

Were such Councils established here their duties would

(¹) The railways in this country are governed by directors who have shares in the respective undertakings, and represent the shareholders (assumed to be about 500,000), but generally their interest in the railways is relatively small compared with that which they possess in land, manufactories, collieries, ironworks, and commerce &c., besides which from their local connections, and as public men, they are keenly alive to the requirements of agriculture, trade and commerce, and in reality represent those interests to a much greater extent than is sometimes assumed to be the case.

not be so light as those which fall to them in Germany. There the questions to be considered must be few, the time occupied in deciding them short, owing to there being practically no competition, and to the great bulk of the rates being based on a mileage scale. Much more complex questions would arise here, much longer time must be taken up in deciding them in England, where rates are adapted to all the requirements of trade and competition in its many forms.

In Holland, Belgium, and France, railways have been constructed with, in some cases, considerable financial assistance from the Governments, and under concessions for certain periods. Not unnaturally or unreasonably the Governments have reserved the right to control the rates and charges to be made while a concession is in existence, or when it ends. It will be found, however, that when there is power to reduce the rates before the expiration of the concession, the State guarantees the dividend in the event of loss arising from the compulsory reduction. Such is the case in Holland. The Dutch Law (Article 29) provides that reductions in the tariff can at all times be ordered by the State. But if, in consequence of such reductions, the net gain of the company be diminished, compensation is to be paid out of the State Treasury, and any dispute as to the amount of compensation is decided by a Court of Justice. In no case, however, must the amount of compensation raise the net profits of the year or years for which it is demanded above 8 per cent. of the Company's capital. Thus the right to control rates is part and parcel of a system wholly unlike our own. It exists in a country where the State has helped to construct, and to a very large extent

actually constructed, railways. It is alien to this country, where capital for the whole of the railways has been provided by private individuals, on the faith of the powers to levy the tolls and rates fixed in their private Acts.

In the Railway and Canal Traffic Bill (1886) was also embodied a proposal to the effect that any person who was of opinion that a company was charging an unfair or unreasonable rate might make a complaint to the Board of Trade, who were to be entitled to call on the company for an explanation and to appoint one of their officers, or a competent person, to communicate with the company and the complainant, and to endeavour to settle the difference amicably between the parties. The Board of Trade were from time to time to submit to Parliament reports of the complaints so made, the results of their proceedings, and such observations as they should think fit. The effect of this provision would have been startling. Even where a rate was within a company's powers—although undue preference was not alleged—at the instance of a trader desirous of obtaining a reduced rate which had been refused by a company and believing that either his own circumstances or those of other traders entitled him to communicate with the Board of Trade, the railway company would be called upon to prove to the Board of Trade that the claim of the trader ought not to be granted. It would be, in effect, litigation made easy and cheap, whether the complaint was good or bad. The President, Vice-President, Secretary, or Assistant-Secretary of the Board of Trade could not spare the time necessary to master the numerous difficult questions and details as to the rates.¹ Notwithstanding the great ability

(¹) In a case of the kind referred to, which was brought before the Board

with which that department is conducted, these officials could not deal with such questions in the same way or within the same time as the traders and the representatives of the companies are able. The companies would probably be burthened with correspondence and discussions on matters already fully gone into in negotiation. The discussion would be necessarily carried on through subordinates or nominees of the Board of Trade, who, it is not presumptuous to say, would be neither interested in, nor specially trained to deal with, such questions. Suppose that the representatives of the Board of Trade and the railway companies disagreed as to the necessity or reasonableness of a reduction in rates, the former would have no authority to compel the companies to comply with their views. Would not the result probably be a cry that Parliamentary powers should be conferred on the Board of Trade to enforce their conclusions? Such a policy would in the end place the railway companies of the country, whose capital has entirely been raised by private enterprise, in a worse position than the railway companies in Holland where the State has done so much for them, or in France, where it has guaranteed the dividends.

When we are invited to place in the hands of a tribunal the control of the rates, it is expedient to note the difficulties which the Railway Commissioners seem to have felt in dealing with the various questions raised before them, and the manner in which they have dealt with them.

of Trade when the Bill was before Parliament, as killed officer of the company was occupied 150 hours, in preparing the information alone to reply to the Board of Trade, irrespective of the time occupied by others in analysing the information, and in corresponding with the Board of Trade on the subject, all of which had no practical result.

In determining under the Traffic Act questions of alleged undue preference, they have been obliged to express their opinion on the reasonableness of particular rates. As to the legal correctness of their decisions, nothing need here be said; for the present purpose it may be assumed that they are open to no legal exception, and we fully recognise the ability and care which they manifest. Only their economical effects are here considered. There would be no difficulty in showing that they have acted upon principles, so far as they have acted upon any, which have not merely not been sanctioned, but have been condemned, by every Royal Commission or Select Committee which has inquired into the subject, and by almost every economist of eminence. On the part of the Commissioners there have been—not unnaturally—some waverings in opinion. But on the whole, they appear to have attempted to frame rates according to cost of service; and they appear not to admit that the existence of competition is a reason for varying them. Now, in the first place they apply—it may be added, necessarily apply—the cost of service principle in an imperfect fashion. They deal only with undue preference in regard to the same or very similar articles. They do not say, what consistent adherence to the theory would compel them to say, that a ton of coals and a ton of tin ingots must be carried at much the same rate; they are bound by the existing classification, which forbids this. Occasionally their decisions are indeed curiously inconsistent in many respects, as was probably inevitable, where they were called upon to face the commercial results which would have followed a too rigid adherence to some of the principles by which they felt themselves bound¹ In the case of

(¹) In *Lees v. Lancashire & Yorkshire*, 1 N. & M. 352, the Com-

the *Nitshill and Lesmahagow Coal Company v. Caledonian Railway Company*,¹ the defendant company claimed to charge more for carrying cannel coal, which, it was alleged, cost 38s. a ton, than they charged for carrying splint, which cost 15s. 6d. On the principle on which the classifications in most special Acts were framed, this would be reasonable; the more valuable article could bear more, and ought to pay more. But the Railway Commissioners decided differently. "As the quality of coal does not affect the cost of carriage to the railway company," they said, "we are of opinion that the two kinds of coal ought to receive the same treatment." If this principle had been carried out since the beginning of railways, if rates had been settled without regard to the value of merchandise, the prosperity of many districts and industries would never have been developed. In the second place, the cost of carriage is, inevitably, sometimes guessed at rather than calculated. We have already stated the nice calculations which must be entered into in order to determine the exact cost of carriage; calculations in which it is practically impossible to attain accuracy. Many elements in cost, the Commissioners cannot accurately measure; the data do not exist. In the third place, the effect of their later decisions is to exclude, practically, if not theoretically, competition from the considerations to be taken into account. This is, not

missioners relied to some extent upon a principle which they do not appear to have since put in force. The question was whether the company gave an undue and unreasonable preference to the Corporation. The Commissioners said that undoubtedly a preference had been given, but they declined to say it was unreasonable (1) because the Corporation did not compete with the complainants; (2) because *the preference was for the public benefit and convenience* (p. 367); (3) because of the nature and magnitude of the coal traffic of the Corporation.

(¹) 2 N. & M. 39.

only for the reasons already stated, contrary to sound commercial principles; it is contrary to the language of the early decisions of the Court of Common Pleas, which distinctly recognised competition as rightly taken into account in fixing rates. In *Garton v. Bristol & Exeter Railway Co.* (1 N. & M. 1859, p. 218), for example, the Court of Common Pleas decided, among other reasons against the validity of a certain charge, because, in the words of Byles, J., "it is not shown that it is rendered necessary for the purpose of meeting and overcoming competition"¹. The early judgments of the Railway Commissioners themselves recognised the right to take into account the existence of competition. In *Foreman v. Great Eastern Railway Co.*, decided in 1875 2 N. & M. 202), the point in dispute was the validity of a scale of charges for the carriage of coal from Peterborough to Norwich and Great Yarmouth and intermediate stations. The Great Eastern Company were alleged to give an undue preference to coal consigned to such stations, as compared with the carriage of sea-borne coal from Great Yarmouth to Norwich and the stations between it and Peterborough. The Commissioners observed: "Nor does the Traffic Act prevent a railway company from having special rates of charges to a terminus to which traffic can be carried by other routes, or other modes of carriage with which theirs is in competition," a dictum inconsistent with the view "that cost of service is the necessary

(1). See the head note on the case, and the language of Williams, J.; also the observations of Cockburn, C. J. in *Harris v. Cockermouth and Workington Railway Company*, 1 N. and M., p. 703. The latter judge, referring to "fair and sufficient reasons" for differences in rates, says, "As, for instance, in respect of terminal traffic, there might be competition with another railway."

measure of rates." In a case decided the same year, *Thompson v. London and North Western Railway Co.*, 2 N. & M. (1875) 115, the Commissioners speak dubiously. They observe with respect to the argument that "the Traffic Act prohibits only undue advantages, and that an advantage given by a railway company to obtain traffic for which it competes with another railway company is not undue" (p. 120). "Such a proposition cannot, in our opinion, be laid down unreservedly. It may be true in certain circumstances; it would not be so in others, and what degree of favour can be lawfully shown to some person to the prejudice of others under the pressure of competition can only be decided in any case that arises by reference to its special circumstances." ¹ In still later judgments there is a faint recognition of the fact that the existence of competition ought to be taken into account; e.g., in *Richardson v. Midland Railway Company*, decided in 1881 (4 N. and M. 1) the Commissioners say: "The difference (between the Burton and Newark rates) or part of it, may possibly be required by the route from the same district, not being the same all the way to the two places, and

(1) The reporters append the following note to the case.

"It appears that competition between two railways, or by sea or canal, is sufficient justification for a railway company reducing its fares to the public, who are affected by such competitions, and can take advantage; but that a railway company cannot, merely for the sake of increasing their traffic, reduce their rates in favour of individuals unless there is a sufficient consideration for such reduction, which shall lessen the cost to the company of conveyance or other services rendered to them by such individuals," vol. 2, p. 121. Probably this represented the general opinion of the legal profession in 1875.

In the report for 1883 the Commissioners refer to "the fair pecuniary interests generally of the company carrying" (p. 1.) as if they might be taken into account.

by the separate portions of line passed over being more costly to work or construct in the one case than in the other ; or, again, may be required by a competition for the conveyance of the particular traffic between the two termini, existing in one case but not in the other. They proceed to speak of "due allowance for such causes of difference," which implies that allowance must be made for both of such causes. But in the *Broughton Coal Company's* case (4 N. and M. p. 191, 1883) the Commissioners use somewhat different language. They observe that "if goods of the same kind are carried to the same destination over the same railway for distances that are not the same, and the gross charge from the intermediate distance is as great as from the more distant one, there is a preference of one traffic over the other within the meaning of the Traffic Act of 1854 ; and that it is not sufficient to rebut this presumption to show that the charge for the longer distance has been reduced to meet a competition from another route." Lately the Commissioners have, to say the least, lost sight of the element of competition in determining rates ; and in all the applications to them, there is no clear instance in which they have found the circumstances in which it ought, in their opinion, to operate.

Among the multifarious complaints against railway companies is one to the effect that companies, instead of competing with and underbidding each other, combine to charge equal rates. This is an illustration of the curious inconsistencies of some of those who criticise the working of railways. Such a practice would be, as will be seen in the next chapter, opposed to the ideas of others who urge that rates should be based on scientific and uniform principles. Such competition, too, would inevitably

lead to valid grounds for complaints, in the opinion of others, of undue preference in contravention of the Railway and Canal Traffic Act of 1854. The fact is, the practice has been tried and abandoned. In the days of road carriers, competition in quoting low rates generally ended in the submission or ruin of one of the parties. Here, and in the United States, experience shews that all such competition on the part of railways must end in combination. However severe the contest may be, and however great the losses in carrying it on, each of the railways continues to exist; they do not disappear like private traders engaged in a disastrous war of competition; and in the end they come to terms. In thus acting, they only do what is done in other industries. In the principal trades of the country are associations which arrange the prices of their products. Colliary proprietors, for example, agree as to the price of coal. Although the hardware merchants seldom vary their price lists, they agree from time to time as to the rate of discount to be allowed. The steel rail manufacturers of Germany, Belgium, England, and Scotland, had recently an arrangement regulating, if not the proportion to be produced by each country and district, the price at which rails were to be sold.

SECTION XVI.

RAILWAY AMALGAMATION.

WE now come to a class of criticisms and proposals wholly different from those which have hitherto been considered. In the report by Sir Bernhard Samuelson (page 22) is a recommendation that railway companies should either amalgamate, or make agreements between themselves, for the division of the receipts from competitive traffic, so as to reduce the working expenses.¹ Probably for the first time has this suggestion come from such a quarter. Manifestly it is beginning to be understood that undue competition between railways is injurious to the companies without being beneficial to the public, and that, in the interests of both, it should be moderated.

Hitherto, the public and Parliament have looked with jealousy on arrangements between railway companies

(1) "The loss arising from the unnecessary multiplication of train services, as well for the passengers as for the goods, the avoidance of which was one of the principal motives which decided the Prussian Government to purchase their railways, may be obviated in this country, by a more intimate fusion of the interests of the various railways, either by amalgamation or by the consolidation of their interests in some other way, under the sanction of Parliament; care being taken that the interests of the public in regard to accommodation and charges are duly safeguarded. I have reason to believe that, so far as the railways north of the Thames and west of the metropolis are concerned, the more active and enlightened directors are by no means unprepared for a step of the kind."

intended to lessen the waste caused by undue competition. The statements so often put forward by companies that the expenditure of capital in the construction and working of unnecessary competing lines is not beneficial to the public, have been disregarded. Any scheme which professed to meet "public requirements," and promised multiplication of trains and the carriage of railway traffic at a high rate of speed, has met with favour in and out of Parliament.

Whether the particular line could only be worked at undue cost, or could yield a proper or, indeed, any return upon the capital to be expended, has rarely been considered. The Legislature has fostered new schemes, and has favoured competition, not economy; it has not recognised how much interested the public were in the prudent expenditure of capital on railways. Had the reports prepared under the guidance of Lord Dalhousie, in order that railways might be constructed according to a definite plan, been acted upon, or had he been able to carry out here his ideas as to railway extension, as he did in India, the rapid growth of railways might have been retarded.¹ But, undoubtedly, the want of any plan has entailed the outlay of a much larger amount of capital than would otherwise have been required. Upon this excess, interest, if it can be earned, is paid; a fact not to be overlooked by those who now desire that the companies should reduce their rates. Such errors are repeated. Even in recent years Parliamentary Committees have authorised on the most trifling grounds new competing lines. True, they expressed no opinion as to the success of such schemes. But it must have been known

(1) See the late Mr. R. Stephenson's evidence before Mr. Cardwell's Committee, 25th February, 1853. Q. 987-9.

that, if the capital were subscribed, it must come from people who were under the impression that only schemes of substantial value would be authorised by Parliament.

Of the many schemes of this description, two or three illustrations may be given. Within the last 13 years, authority was obtained to construct a local line for the accommodation of a sparsely inhabited agricultural district. In this form it was favoured by the companies in whose district it was. The prospect of a return on the capital, however, was so small that comparatively little money could be raised. A scheme was, therefore, got up for obtaining Parliamentary powers to extend the line on the plea that it would thus become a through competitive line connecting two important existing systems; a scheme which quite ignored the fact that the two systems had already a means of communication, which it was their interest and desire to develop to the utmost against any hostile scheme. A large portion of the capital was procured on the faith of statements contained in carefully framed prospectuses, for the issue of which the financiers were paid £60,000. A considerable portion of the capital came from persons residing in remote parts of the country. Some money was borrowed for a time at the rate of 16 per cent. per annum. Although about £1,200,000 in cash and paper has been expended, the receipts do not cover the working expenses, including the rent of stations and expenses of junctions; the line must be imperfectly worked; and of course not a farthing of interest or dividend can be paid on any portion of the capital.

A second illustration may be given. About twenty-five years ago a branch railway of 6 miles in length was pro-

moted and sanctioned by Parliament as part of a line to compete with an existing railway. The original cost was estimated at £42,000, and the total amount of capital authorised was £80,000. Not until 20 years after the Act was obtained was the line opened for traffic. During this period no fewer than eleven applications for increased capital or other powers were made to Parliament; and three schemes of arrangement were entered into with creditors and confirmed by the Chancery Court. The total capital expended has been upwards of £157,000, of which 44 per cent. has been raised by loans, 46 per cent. by preference shares, and 10 per cent. only by ordinary stock. What need there was of the line may be inferred from the fact that, although it has now been open for some five years, the gross receipts are not sufficient even to pay the locomotive expenses.

One more case may be mentioned. An application was made to Parliament for powers to construct a line about 7 miles in length, which was estimated to cost not far short of £120,000. After four years a further application was made for extension of time and for power to raise more than half the share capital by the issue of preference stock and to pay interest out of capital. It was then given in evidence that upwards of one-fourth of the estimated cost of the line had already been expended, although no works had been constructed, and only £1,000 paid towards the acquisition of land.

In such cases the diversion of traffic from existing railways usefully serving the public, the loss of interest on the outlay if the line is in the end purchased by them, and the expense of working it, are so much dead weight which the railway system has to bear. Thus the companies are so much less able to reduce rates.

Many similar cases could be stated. Notwithstanding the absorption of this class of schemes, there is still upwards of £61,000,000 of capital which has paid no dividend at all. An inquiry into the promotion and construction of many of the railways authorised during the last 25 years, would probably bring to light facts as startling as those elicited by the Foreign Loans Committee. The established companies oppose such schemes. But their opposition is generally looked upon as arising solely from selfish objects. They are told that it is not their money which is to be expended, and that though they may have a nominal, they have no substantial, right to oppose. It is a common observation that, if a new line afford accommodation for a part of the traffic carried by the opposing company, it will be useful to the public, and that if it will not carry any such traffic the objections of the opposing company are groundless. Such arguments succeed; the Bill is passed; and what happens? From long experience the existing companies know that nearly all the schemes which are at first brought out as independent competing lines will sooner or later be pressing to be worked or leased, or be in the market, and that the promoters of any of them not taken over, will be continually making applications to Parliament or to the Railway Commissioners, posing, not as an aggressive, but as an ill-used company, and harassing its neighbours with a view to be purchased or to levy blackmail.

The present position of railways is largely due to the action of Parliament and to the public, though some blame is no doubt attributable to the companies themselves. A great improvement has taken place in the relations of the companies, and in the conduct of railways in recent years:

But there has been too much readiness, indeed anxiety, to invade districts accommodated by neighbouring companies. In the working of their lines exaggerated importance is too often given to competition without regard to its utility. Frequently passenger trains are run without sufficient regard to whether or not they are fairly remunerative. Wagons containing only a small quantity of goods are often sent long distances at little profit, if not at a loss. Goods trains are run at an excessive speed, and therefore do not and cannot carry such remunerative loads as in other countries, notwithstanding some of the undoubtedly low rates charged there. So-called "concessions," not really essential, are made to trading or other interests, when it would be better that the companies should earn on the traffic a reasonable income to go into the pockets of the shareholders, or be expended, as suggested by Sir Bernhard Samuelson, in improved accommodation.

While there has been too much proneness to favour competing schemes, there has been an unreasonable jealousy of agreements between companies. Traces of the jealousy with which Parliament has regarded agreements between companies, even for merely working branches in extension of parent lines, are shewn by the provision that agreements shall be reviewed every ten years. It also appears in the views of the Railway Commissioners as expressed in section 6 of their twelfth report (1885). They state that it is the practice of some companies to get such agreements confirmed by means of a schedule to their private Bills, which gives the public no opportunity of knowing what those agreements are about, and that the agreements are confirmed, either for long terms, or in perpetuity, without any provision

for a periodical revision in the interest of the public. And yet it is not known that the public have derived any advantages from the periodical revision of agreements for working branch lines, and whenever application has been made to Parliament for absorbing a branch line, it has been authorised without any difficulty.

In the last session of Parliament, the Midland Company applied for power to enter into, and carry into effect, agreements with certain other railway companies with respect to the provision of joint terminal accommodation at towns and stations on their respective systems; the alteration and enlargement of existing stations for joint purposes; the providing at joint expense of train services between towns and places served by their respective systems, and of locomotive engines and stock for such joint trains; the appointment of joint staff and the fixing of rates, fares and charges in respect of traffic using such joint stations, or carried by such joint trains, and the division of the receipts therefrom. Any agreements made under these powers were to be subject to the approval of the Board of Trade. With the present view held by Parliament and by a section of the traders as to railways, it is, however, questionable whether such agreements would be confirmed, except on terms which it would be impossible for the companies to accept.

In this country—which is unlike the United States in this respect—agreements to charge equal rates for competitive traffic have been, on the whole, adhered to. Arrangements for the division of such traffic are therefore not so much required here as there. The great desiderata of the companies are the limitation of competition within reasonable bounds, stopping the waste which it now causes, and fully affording to

each other and to the public and traffic all practicable facilities and accommodation

Agreements for the division of traffic, or for "pooling," as they are termed in the United States and Canada, are not unknown in this country. Some have been sanctioned by Parliament; others have been made between the companies without any express Parliamentary authority, and have been carried out. For instance, Mr. Gladstone made, in 1851, an award apportioning, for a period of five years, the receipts for traffic carried between, London, York, Leeds, Sheffield, and several other places, between the Great Northern, and London and North Western, and Midland Railways. In the year 1857 he made a further award determining, for a period of fourteen years, the proportions in which the proceeds from the passenger and goods traffic between the same and other places, including Hull, Halifax, Bradford, &c., were to be divided between these companies and the Manchester, Sheffield and Lincolnshire Company.

Parliament has sanctioned agreements for the division of traffic receipts between the South Eastern and London Chatham and Dover, and between the London Brighton and South Coast and South Eastern Companies. But it is more than doubtful whether the parties to these agreements have derived all the advantages which, consistently with the interests of the public, they might have obtained.

It is well known that nowhere on the Continent has the construction of competing lines been carried out to the same extent as in this country; it is one of the great permanent advantages possessed by Continental railways.¹ In France

(¹) The General Prussian Railway Law of 1838 (S. 44) under which many of the Prussian railways were constructed, expressly declared

the companies have districts within which they exclusively afford railway accommodation. The Government recognise and sanction agreements between the companies for the prevention of undue competition where it inevitably arises, and for an apportionment of the receipts from competitive traffic. The following is an instance :—An agreement made 31st March, 1885, between the Western of France Railway and the Orleans Railway Companies, provided that the receipts in respect of traffic carried between Paris and Angers, Nantes, Montoir, St. Nazaire, Redon and stations beyond, after deducting taxes ("Impôts") and terminals should be apportioned thus :—

1. Traffic between Paris and Redon and stations beyond as far as Plœrmel and Pontivy—
55 per cent. proportion to the Western Company.
45 " " " Orleans Company.
2. Traffic carried between Paris and Angers, Nantes, Montoir, St. Nazaire, and branches leading out of the latter two stations, as well as Pont Chateau, by whatever route the traffic may have been carried—
49 per cent. proportion to the Western Company.
51 " " " Orleans Company.
3. Traffic carried between Paris and stations beyond Angers or Martre d'Ecole on the States Railway—
 $\frac{2}{3}$ to the Western Company.
 $\frac{1}{3}$ " Orleans "

In Belgium there is practically no such competition as exists in this country. The Government have had to face

that "no railway running in the same direction as the first one between the same principal points shall be allowed to be constructed by any undertakers other than the undertakers of the first railway, within a space of 30 years from the opening of such railway, provided that improvements of the communications between the points and in the same direction by other means shall not be interfered with."

the difficult questions respecting it; they have solved them in a manner different from that adopted here. They have entered into an agreement for the division of competitive traffic between the State railways and the Grand Central Belge. Under this arrangement the route over which the traffic is conveyed is credited with the whole of the terminals, and 50 per cent. of the carrying receipts. The remaining 50 per cent. is apportioned between the two competing routes on the following basis, viz:—

Each route is credited with 25 per cent. if the mileage is equal.

The longest route is credited with
22½ per cent. if the mileage does not exceed the
shortest route by 5 per cent.

18	„	„	„	„	10	„	„
13½	„	„	„	„	15	„	„
9	„	„	„	„	20	„	„
4½	„	„	„	„	25	„	„

The route selected by either the State railways or the Grand Central Belge must not exceed the distance by the shortest route by more than 25 per cent.; above which limit all competition ceases.

In Germany exist arrangements practically amounting to a division of traffic. For instance, the shortest route from Elberfeld to Bâle is viâ Coblenz-Strasbourg. The traffic to Bâle is carried every alternate month by the Right Rhenish route over the Badisch State railway, and by the Left Rhenish route over the Alsace-Lorraine railways. As regards traffic with Austria-Hungary arrangements are made which ensure to each line a certain percentage. In the event of the returns showing that one company have

not carried their fixed share, they are entitled to a money compensation.

Undoubtedly the suggestion of Sir B. Samuelson that reductions should be made in the expenses of working railways, and that undue competition should be avoided by arrangements between the companies, is important and well worthy of consideration. To commerce generally, and to the traders using railways, it might clearly be advantageous. It may, however, be premature to expect that at present such agreements as he suggests would be sanctioned by Parliament, except upon onerous conditions. If such agreements were favourably regarded by the representatives of commerce and agriculture in Parliament, the companies would more willingly enter into them. In many cases greater economy and improved working would undoubtedly result, and there is no reason why such arrangements should not be made beneficial to the public as well as fair to the railway companies.

SECTION XVI.

RAILWAYS AND CANALS.

GREAT stress is laid on the importance of canals. Railway companies have been accused of preventing them from competing with railways, of improperly getting possession of them, not maintaining them, and so acting as to force the traffic on to their lines. In Parliament and elsewhere they have been charged with purchasing canals and then deliberately killing them, either by ceasing to keep them in repair or by reducing rates upon their lines to a point which makes competition by the canals impossible. These assertions have been made before Royal Commissions and Select Committees. In no official report or other authoritative document, however, have they been declared proved; and it is submitted that facts do not warrant them. Not to the artifices of railway companies, but to altered conditions of trade is due, in the main, the inability of many canals to hold their own against railways. The necessity for rapid transit, the disinclination to keep large stocks, the growth of the practice of applying to the producer or manufacturer as orders come in, and as occasion requires, and the low rates by railway for articles which canals can convey, have all been unfavourable to the latter. It is not unimportant to note that no Commission or Committee has been able to point out any mode in which the decline of canal traffic—"the creeping paralysis of our inland waterways"—could be

arrested. We may, too, incidentally note the considerable diversity of opinion as to the importance of canals generally. Some complain that great injury has been done to the trading community by the absorption of the canals by railway companies.¹ Others will have it that too much importance is attached to canals; they have been even described as "*those wretched little waterways which could never compete successfully with the great railway companies.*"²

In 1883, a Committee was appointed by Parliament to enquire into the condition and the position of the canals and internal navigation of the country, to report thereupon, and to make such recommendations as might appear necessary. It sat during the greater part of the Session. Many charges were made against railway companies which owned canals. They could not be answered in that Session for want of time. So little importance seems to have been attached to them or indeed to the subject of canals, that the Committee was not re-appointed in the following Session. No report was therefore ever made.

The subject affords a valuable illustration of the railway legislation in this country, and of the prejudice and misapprehension which exist in some quarters as to the conduct of railway companies. Far from there being an inordinate desire to absorb canals, it will appear that those which belong to railway companies have, as a rule, been forced upon them, either to remove the opposition of the canal companies, or as a condition of railway Bills being passed.

(1) Mr. Mundella, Debate on Railway and Canal Traffic Bill, 6th May, 1886. Hansard, vol. ccv., page 461.

(2) Sir B. Samuelson, Debate on Railway and Canal Traffic Bill, 1886. Hansard, vol. ccv., page 441.

Let us give an instance of the treatment which the promoters of railways, when opposed by the representatives of waterways, have received at the hands of Parliament. In respect of the Severn navigation, the Great Western Company are at the present time under a heavy liability. This liability was forced upon their predecessors, the Oxford, Worcester and Wolverhampton Railway Company, when applying for powers to construct their railway, which did not really compete with the navigation to any serious extent, if at all. Clause 94 of the Oxford, Worcester and Wolverhampton Railway Act of 1845 recites that the Severn Commissioners had raised the sum of £180,000 upon the security of the tolls on the Severn navigation, in the expectation that those tolls would reach the sum of £14,000 a year. It provides that the Great Western and the Oxford, Worcester and Wolverhampton Railway Companies should, from the opening of the Oxford, Worcester and Wolverhampton Railway for traffic between Worcester and Wolverhampton, and so long as the principal moneys raised by the Severn Commissioners, or interest thereon, remained due, make up to the Severn Commissioners any deficiency between the actual amount of the tolls for any year, and the sum of £14,000. The Great Western Company do not possess or even control the navigation. Yet this liability was forced on the promoters as a condition of obtaining their Bill; and in respect of it the Great Western Company actually now pay between £6,000 and £7,000 per annum!

How much truth there is in the allegation that the canals owned by railway companies are not properly maintained by these companies, but that on the contrary the railway companies obstruct the trade on them, may be shown

by the case of the Kennet and Avon canal, which is also the property of the Great Western Company.¹

This canal was authorised by an Act of 1794. The canal is between Newbury and Bath, a distance of 57 miles. But the water communication is extended beyond Newbury on the one side to Reading by means of the River Kennet, and from Bath to near Bristol on the other side by means of the River Avon. The total navigable distance between the points named is $86\frac{1}{2}$ miles. This canal is joined by the Wilts and Berks canal (which is connected with the Thames by the Thames and Severn canal) and the Somersetshire Coal canal. Thus the Kennet and Avon canal forms part of an extensive system of waterways, by communicating direct with the Thames on the one hand and the Severn on the other. The total cost of the Kennet and Avon canal was £1,011,589. It was opened in 1810, from which date, up to 1813, no separate accounts of capital and revenue were kept. But the returns from 1813 show that the receipts of the canal gradually increased from £22,075 gross and £11,843 net in 1813 to £58,820 gross and £39,113 net in 1840. The opening of the Great Western Company's line between Reading and Bath in 1840-41 seriously affected

(¹) The Clause in the Regulation of Railways Act, 1873, as to the maintenance of canals is as follows:—

Every Railway Company owning or having the management of any canal or part of a canal shall at all times keep and maintain such canal or part, and all the reservoirs, works and conveniences thereto belonging, thoroughly repaired and dredged, and in good working condition, and shall preserve the supplies of water to the same so that the whole of such canal or part, may be at all times kept open and navigable for the use of all persons desirous to use and navigate the same without any unnecessary hindrance, interruption, or delay.

the canal revenue. The canal company applied to Parliament for powers to construct a railway alongside their canal. Failing in that project, they in 1848 availed themselves of the powers of the General Canal Act, and entered upon the carrying business, from which, however, they derived little profit. In fact the first year was the only year when the revenue derived from the carrying business exceeded the expenses. The opening of the line of railway between Chippenham and Trowbridge in 1848-50 still further injured the canal traffic. The canal company offered to transfer their undertaking to the Great Western Company; and the terms for such transfer were agreed and approved by Parliament in 1852. In sanctioning the arrangement, Parliament, however, imposed upon the Great Western Company the condition that, if at any time the canal tolls were complained of as, in comparison with those of the railway, prejudicially affecting traders on the canal, the Board of Trade should make such regulations and fix such tolls as they might think fit. In 1867-1868 the traders using the canal memorialized the Board of Trade to reduce the tolls. An Arbitrator, who was appointed, reported in favour of a reduction, which was accordingly carried out. The tolls thus fixed were charged up to 1877, when the traders again memorialized the Board of Trade. The matter was referred to the Railway Commissioners, before whom it was given in evidence that if further reductions were made on certain articles constituting the chief trade of the canal, the traffic would materially increase. The Railway Commissioners thereupon reduced the tolls upon those articles from 1d. per ton per mile with a maximum of 6s., to $\frac{1}{2}$ d. per ton per mile with a maximum, for

the whole distance of $86\frac{1}{2}$ miles, of 2s. But the statements of the traders that an increase of the traffic would follow upon a reduction of the tolls have been found to be entirely baseless. Notwithstanding this great reduction, the traffic had fallen from 159,190 tons in 1876, to 125,807 in 1885.

The gross receipts in the year 1840 were, as already stated, £58,820; in 1848 they had fallen to £32,205; in 1852, when the canal was taken over by the Great Western Company, to £24,291, and in 1885 to £4,237. The canal has been maintained in an efficient state of repair by the Great Western Company, in accordance with the obligation imposed upon them by their Act of 1852, and the navigation has been always kept open. Notwithstanding the large reductions in the tolls, the traffic has year by year diminished, until in 1885 the expenses considerably exceeded the receipts, without taking into account the interest (between £7,000 and £8,000 a year) which the company have to pay upon the capital expended in acquiring the canal undertaking. These are weighty facts. Although the Great Western Company purchased the Kennet and Avon canal, pay interest on the purchase money, and maintain it, and although they are deprived of the power to fix the tolls upon the canal, and have had to submit to two reductions—the maximum under the latter arrangement being for the whole length of the canal little more than one farthing per ton per mile in respect of any description of goods—the traffic has continued to fall off. The tolls do not yield sufficient to pay the salaries and wages of the working staff, or even the actual cost of the labour and materials necessary for maintenance and repairs.

The foregoing illustration, may help to correct the

statements which have been made as to the conduct of railway companies in the capacity of owners or workers of canals. Not only the Kennet and Avon canal, but, it is probable, all the other canals which have been taken over by the Great Western Company, must have been closed years ago if they had remained in the possession of the canal companies. The public have, in fact, had the opportunity of availing themselves of the water carriage when it was to their interest to do so, just because the railway company took over the canals and kept them in working order.

Though every railway company owning or managing a canal may be compelled under the Section cited on page 193 to keep it in repair, only one application for that purpose has been made to the Railway Commissioners. This is scarcely consistent with the loose, unverified accusations as to the shortcomings of railway companies. Besides, it is not true that the whole canal system has passed under the influence of railways. Of the 3,029 miles of canals in Great Britain, 1,592½ miles are owned or managed by other than railway companies.¹ An examination of the map prepared by Mr. Abernethy, C.E., for the Select Committee of 1883, shows that south of a line passing through Worcester, Birmingham, Nottingham and Hull, there is scarcely a canal of any importance, with the exception of the Kennet and Avon

(¹) Appendix to Report of Select Committee on Canals, page 214. "These lengths are exclusive of the River Thames, Severn, Wye, Humber, Wear, and Tyne in England; the Rivers Clyde, Forth, Tay, and the Caledonian Ship Canal in Scotland; the Shannon and other navigations in Ireland." According to Mr. Taunton's Report, the canals and navigable rivers in England, Wales, and Scotland under control of railways are 1,447 miles as against 2,335, which are independent of railway companies (Appendix 228.)

canal, between Bath and Reading, permanently, temporarily, or partially in the hands of a railway company.

The fact appears to be that canals flourish only where certain conditions exist. Where a large traffic can be conveyed in full boatloads; where the country is flat, and there are consequently few locks; where large vessels propelled by steam can be used; where works are so situated that the cost of collection or delivery can be saved; in such circumstances, canals are suitable for coal, chalk, cotton, stone, bricks, pig-iron, round timber, grain, &c., and such like goods carried in large quantities, or for short distances. They can, no doubt, when such conditions exist, be beneficially used at a low cost for carriage; but for traffic not large, or composed of a great variety of articles, which have to be collected in small quantities from different places, or to be distributed all over the country, canals cannot successfully compete with railways. Want of water in dry summers, interruptions from ice in winter, and diversity of gauges in locks and tunnels—all matters which add to cost—are great inconveniences, and grave objections to water carriage. Often carriage by canal necessitates the erection of warehouses for storing goods, which is saved by the transit of traffic by rail. The speed and despatch demanded by the modern necessities of trade have tended to throw upon the railway more and more of the traffic which formerly went by canals, as well as the increase in the traffic of the country. In Staffordshire, canal boats meet from all the principal towns such as Manchester, Liverpool, and parts of Yorkshire in the North, and London and Bristol in the South; *but no through traffic is exchanged*. All the traffic of Staffordshire in iron, hardware, chains, anchors,

nails, &c., outwards, and grain, timber, spelter, bone, manures, &c. inwards, requiring speed, is carried by railways. Where the canal charges are equal to, or lower than, the railway rates, the railways and canals divide the traffic. Newly-opened collieries and works are now, as a rule, laid out for loading into railway wagons, not into boats, because railway stations and railway trucks give greater facilities for distribution of coal to all parts of the country. No doubt certain large canals—for example, the Aire and Calder, Bridgwater, and the Leeds and Liverpool—can be profitably worked in their exceptional circumstances, as they possess a plentiful supply of water, and traverse a long stretch of comparatively level country. Where such conditions exist for distances of fifty to sixty miles, canals may compete successfully for heavy traffic with railways.

Nor have the proprietors of canals done the utmost to overcome inherent disadvantages. The existing inland system, with only 7-foot locks, is inadequate. The canals are too shallow; they are wasteful in the consumption of water; and they cannot be worked economically. The cost of working larger boats of 300 tons on suitable canals, hauled by steam, and loaded and unloaded by the best appliances of steam cranes would, of course, be much less expensive than that of working the boats of, say 30 to 60 tons, now used.

The cost of haulage on the narrow canals is much in excess of the cost of conveyance by rail, and the difference remains,¹ notwithstanding all efforts to improve the canals; efforts which, to be really useful, it was estimated

(¹) See evidence before the Select Committee on Canals, in 1883.

would cost about £12,000 a mile. Mr. F. Morton, a canal carrier, stated that his firm lost from £100 to £150 per boat, per year, on certain of their "Fly" or quick boats, which were worked as an auxiliary to their general business with a view to compete with the railways, and help to retain that portion of the "Slow" traffic which they still have.

In countries possessing a large network of canals and other waterways—in France, Holland, and Germany (the Rhine provinces) for example—and where railway accommodation is not so complete as in this country, canals are necessarily important channels of communication. In France the waterways consist of—

				Miles
Navigable rivers	...	...	...	4,627
Canals	...	...	...	2,967
				<hr/> 7,594

Except 534 miles the whole of the mileage is the property of the State, and canals have been artificially fostered by it. According to a report prepared by M. Krantz, in 1872, and submitted to the Select Committee on Canals in 1883, the expenditure upon the waterways in France was on that date £32,738,715 on canals, and £13,557,867 on rivers, a total of £46,296,582, while the cost of maintenance for the year was upwards of £336,000¹.

In Belgium the aggregate length of the canals and navigable rivers is 1,254 miles, seven-eighths of which belong to the State. On a great portion no toll is charged ;

(¹) M. de Foville says (1880) "*Sur les canaux de l'Etat, la suppression totale des droits de navigation sera peut être bientôt un fait accompli*" p 134.

and on the remainder, sums varying from 3½d. to 1s. 1d. per ton per 100 miles.

In Holland there are nearly 3,000 miles of canals and waterways, the former of which practically belong to the State.

If the explanation which has been given be not correct—if the great obstacle to the success of canals in this country be not their inferiority, as compared with railways, in the carriage of goods to answer the needs of trade—why have no new canals been made for some fourteen or fifteen years? They cost much less per mile than railways, and their maintenance expenses are not so heavy. That they are falling into decay in this country when left in private hands, is due, in the main, to the fact that this country is well supplied with railway accommodation, and that for most kinds of merchandise they are not such an efficient mode of transport as railways.¹

(¹) There is a large mileage of canals belonging to canal companies, and considering the views expressed by some as to the use which could be made of the canals which belong to the railway companies, it would have been instructive if the proprietors of all the independent canals had shown by the manner in which they had maintained and worked them, that the railway companies' canals could be more profitably and usefully worked than they now are.

CONCLUSION.

THE chief complaints which have been discussed fall under two heads ; first, the statements expressed in many forms that rates on the Continent are lower than rates here, that this difference injures our trade, and that English railway rates ought therefore, to be reduced ; secondly, that rates are based on no principle, that a scientific system ought to be adopted, and that import, transit, and certain other special rates, as the greatest anomalies, ought to be prohibited. A few words remain to be said to summarise my arguments as to each of these statements.

The facts and figures mentioned at pages 144-8, and elsewhere have shown, it is hoped, that for instance, the exportation of iron or coal—the articles more often mentioned in the controversy—is not prejudiced by the railway rates charged in England as compared with those charged abroad. There has been, undoubtedly, some loss of trade in particular markets. For instance, coal was formerly sent from this country to Antwerp, Rotterdam, and Amsterdam. It is now replaced by Belgian and German coal. Is this very surprising? Is it reasonable to expect that colliery proprietors on the Continent would not supply coal, or the Governments, the proprietors of the railways, not convey it at anything above cost price rather than allow foreign coal to be imported, their collieries to stand idle, and their people to be unemployed? Coal of superior quality can be shipped at Newport and Cardiff at from 6½d. to 1s.

per ton. What abatement could reasonably be expected from rates based on such a very low scale? What effect, if a reduction were made, could it have upon the alleged foreign competition, and upon the depression in trade?

The prices of coal are low because of over production, and undue competition between colliery owners. The extravagant prices obtained by colliery proprietors in 1873-4 led to the opening of many new collieries in the South Wales, Northern and Midland districts of England, as well as in Germany and elsewhere. The result was to create a capacity of output far beyond the demand—160,000,000 tons per annum now as compared with 127,000,000 tons in 1873. The desire which exists in every district for reductions in railway rates is not so much to meet foreign, as home competition; the strength of that desire is ascribable to the activity and intensity of the latter competition.

In regard to export trade, the inland producers of manufactured goods must be at a disadvantage as compared with their rivals on the sea coast. But no complaint that the railway companies had diverted traffic from England abroad by exorbitant rates was made out before the Railway Rates Committee. The Royal Commission on the Depression of Trade have heard much evidence to that effect, but they have not thought it necessary to call upon the railway companies for any reply. To very different causes—some of them far reaching and deep—is due the depression which interested persons would attribute on superficial grounds to the operation of rates.

Upon the policies pursued by foreign Governments in regard to the construction and working of railways, it is unnecessary to pass any opinion. No trustworthy judg-

ment is possible without fully considering all the circumstances—especially the difficulties to be encountered and the objects which the Governments had in view. It is enough to point out how radically different are the railway systems here and abroad—how much at variance are the policies pursued by our Government and by those of Continental States. Here the sole principle running through railway legislation has been to depend upon private enterprise, and to encourage competition between the companies.¹ Parliament has afforded no assistance to them, except indeed conferring the power to purchase, often on payment of exorbitant prices, the necessary land. Even when property of the State has been required by a railway company, the Government have, as a rule, been as exacting in their terms as any of the now maligned landowners, wholly different has been the policy of Governments abroad. Not only have railways been saved the payment of extravagant compensation or legal expenses in obtaining powers to construct the

(¹) "Monopoly" is at present the favourite word of the adversaries of railways; everything is permissible because railway companies have a "monopoly." This word has at least three senses. Monopoly in the strict legal sense in which the Bank of England is guaranteed by statute, the exclusive right of issuing notes within a certain area; monopoly in the sense of being able to exclude other competitors, because in a commercial point of view there is no room for competition, or because the work could not be done more cheaply or better by others. Messrs. W. H. Smith may be said to possess a monopoly in this sense; monopoly is equivalent to property. No railway company possesses a monopoly in the first sense. No company is guaranteed against competition within any area, as many of them know to their cost. Most attacks against railways are justified by using the word, true in the second or third sense, as if true in the first; and persons in eminent positions occasionally condescend to sanction the use of this fallacy.

railways or acquire property, but inasmuch as the public in France did not, as in England, come forward to provide the necessary capital, the State supplied large portions of the capital of some railways, and contracted heavy obligations to promote the construction of others. In Germany, the State is responsible for the interest on the capital, the Government alone bearing any loss arising from charging low rates or otherwise. That also is the position of the Government in Belgium, which is responsible to the extent of 71 per cent. of the railway system in that country. The principles which have guided the Belgian Government in fixing railway rates appear from the extract from the report of the Debate to be found on page 115. At an interview which M. Vandenpeereboom, the Belgian Minister of Railways, Post and Telegraphs, was good enough to grant the writer, this was confirmed. Asked "what had been the object which the Government had in fixing the tariff; whether they had in view the obtaining of a fair interest on the outlay as a commercial undertaking, or whether the object was to develop the resources of the country, looking to a return on the outlay as a secondary consideration," M. Vandenpeereboom replied "*that the object had been to develop the resources of the country, and therefore a return on the capital was not of primary importance.*" These fundamental differences cannot be disregarded; the fruits of systems so radically dissimilar cannot be expected to be the same.

If the State here, as in France, had provided without charging interest towards the capital expended upon the railways in this country, the same proportion as was so provided by the State in France (say upwards of £200,000,000), and guaranteed from 7 to 11 per cent. dividend on the remainder

of the share capital; if it had, as in Holland, found three-fifths (£480,880,000) of the total sum expended on British railways, and accepted less than one per cent. interest upon the advance, the railway companies in this country could have afforded to carry at rates considerably lower than they now carry. It would not have been unreasonable in that case on the part of traders to have called on them to do so.

But the benefits, such as they are, of the Continental system cannot be fairly claimed without bearing the cost. Other countries, having in view advantages from railways, have paid for them with public money, and are prepared to pay still further for them at the expense of the taxpayer; it would be an unreasonable and scarcely honest policy to try to get indirectly the same rights and advantages without payment.

Our Government have been called upon to reduce the rates of the railway companies upon the complaint of traders that they have to compete with French, German, and Belgian traders, who are served by what, speaking generally, may be termed "subsidised lines." To such an application the answer of the Government of this country, who have hitherto declined to aid the sugar manufacturers in their competition with those in France, supported though the latter are by State bounties, cannot be doubtful. Nor would purchase by the State remove all the differences which have been mentioned. Some of them cannot now be overcome. If the Government did purchase the railways, and by reducing the accommodation to something like that given on the Continent, were enabled to diminish the working expenses; if they placed the railways on the same footing as regards duties and taxes as the

Government lines in Germany, the fact would remain that the railways in this country have cost from 45 to 120 per cent. more than those on the Continent, and that in wages alone there is a disparity which they would not be able materially to alter.

The volume of trade in England, it may be said, is greater in proportion to that of other countries; this should be considered, it may be argued, as an equivalent for the greater cost of construction and working of the railways. The fact that the average dividend is only 4·02 per cent.—that is, two-fifths of the dividend which in 1844 it was considered the railways should pay—is one of several answers to this contention.

A few remarks may be made with respect to the second class of complaints—those which relate to the mode of fixing rates.

The chief question is, What rates will at once yield a fair return on the capital of railways and best accommodate and develop the trade of the country? The early Acts provided that they should be fixed according to mileage. This, as we have seen, was altered by s. 90 of the Railway Clauses Act 1845. Are railway companies no longer to carry out the provision of that Act, and continue to charge rates “so as to accommodate them to the circumstances of the traffic?” That principle has guided them for forty years, and certainly ought not to be altered without good cause and full consideration. Instead of merely inveighing against the present mode of fixing rates as unscientific, those who are dissatisfied should explicitly state what mode they would substitute, and make clear by full explanation that it would be at once fair to the companies, and not injurious to the

trade of the country. To charge according to actual cost of conveyance, or on a strictly mileage basis, has been shown to be impracticable and impolitic. What other modes can be suggested?

If the mode of fixing rates adopted in France, Holland, Belgium and Germany—systems which differ from each other—are suited to those countries they would be inapplicable here. In practice they have to be modified. In Holland, for instance, the theory is mileage rates, but the greater portion of the traffic conveyed by railways is, in fact, carried on under special contracts wholly inconsistent with the principle upon which the railway rate system is nominally based, which, if imitated in this country, would afford continuous occupation for the Railway Commissioners.

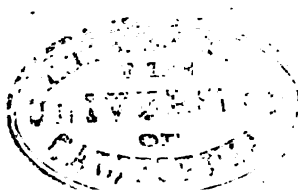
The main complaint against the English companies is that they so charge differential rates as to encourage foreign competition. The effect of these rates is apt to be overestimated or misunderstood. The benefits which the manufacturers derive from the low export rates—based upon exactly the same principle—are entirely ignored. It may be a matter of doubt whether it has been prudent on the part of railway companies to consent to some of the import rates complained of. Indeed, this doubt may be entertained, even if there is no substantial grievance, and it may be desirable that Parliament or the Board of Trade should institute an inquiry into the subject, which affects not only the interests of railway companies, agriculturists, and manufacturers, but also those of consumers, steamboat proprietors, merchants, and seaports.

No system of rates can be suggested, much less adopted, which would satisfy the desires of all traders. When the

recommendation of the Railway Rates Committee is carried out—when one uniform classification is adopted over all the railways, and the maximum rate clauses of the Companies are consolidated and revised on the basis of their existing powers—any difficulty in ascertaining whether the charges are within the companies' powers will be removed. The reasonableness of the charges for terminal services will be determined by the Railway Commissioners.

Instead of the many scales of tolls now in force on all large systems of railways—due to their being built up of originally independent lines—one or at most two scales of tolls will govern the entire systems of companies. By this process a great improvement will be effected. Many of the anomalies in the rates will be removed. But it is to be hoped, in the interest of the trade of the country as a whole, that no legislation affecting railways, while preserving the existing provisions against undue preference, will interfere with the right of the companies to charge, within their maxima, differential rates such as the traffic will fairly bear ; a power which has enabled them to meet the requirements of producers and consumers in varying circumstances.

These observations have not been written with a view to prove that there is no scope for criticism in the management of railways in this country, but are made with every desire to comprehend and appreciate all reasonable objections. They do not pretend to solve all difficulties of the railway problem ; but they may, at least, show the serious dangers which would arise if some of the crude and popular proposals often put forward were adopted, and may aid in arriving at a safe and equitable settlement.



APPENDIX I.

COMPARISON BETWEEN ENGLISH AND FOREIGN RATES.

THE figures and facts which have been stated prove that, as a rule, no fair, or even useful, comparison can be made between rates per ton per mile on railways in England, and those charged on railways in continental countries. A multitude of circumstances — original cost of construction, difference in gradients, nature of services performed, speed in transit, limited liability of foreign companies, opportunities for getting full loads, immunity from taxation—must all be taken into account before a just comparison can be established.

But even assuming due regard is not given to these striking differences the inference to the extent drawn by Sir B. Samuelson is not accurate; the rates on the Continent are not universally lower. Sir B. Samuelson's report contains many errors of detail; and some of them are worth noting, because they are frequently repeated. Comparisons throughout have been made without due regard to the conditions attaching to the rates, or the different circumstances under which the traffic is carried. We give a few instances of the errors; errors, it may be observed, not merely in calculation but in the very bases of the comparison.

An effort has been made to reduce the English rates (which include collection and delivery) to station to station rates, with the object of comparing them with similar rates in other countries. But many of the deductions are inaccurate and

misleading. Instead of adding to the continental station to station rates the charges for cartage, which in Brussels is 4s. per ton, and in other Belgian towns about 2s. 5d. at each end, Sir B. Samuelson has apparently made arbitrary deductions of sums varying from 3d. and 4d. to 1s. and 2s. per ton for cartage from British rates. These are manifestly insufficient deductions. It is impossible that services could be performed for such sums, especially in London. We cite a few illustrations of this class of errors.

For IRON WIRE packed from Birmingham to London the rate is shown as 24s. 4d. per ton; the actual rate is 28s. 4d. per ton, including collection and delivery. Apparently 4s. per ton has been deducted for cartage at both ends; that is *merely* 2s. per ton for cartage in London, although the cost of delivery in such a city as Brussels would be 4s. per ton.

Similar remarks apply to the rates for unpacked iron wire from Birmingham to London and Manchester, which have been treated in the same way.

COTTON GOODS from Manchester to Oxford.—The rate shewn on page 32 is 42s. per ton, station to station; the correct rate, including collection and delivery, being 42s. 6d. per ton, so that 6d. per ton, or *3d. per ton only at each end*, has been apparently allowed for collection and delivery.

WOOLLEN, WORSTED AND STUFF GOODS from Bradford (Yorks) to Norwich.—The rate shown on page 32 is 41s. per ton, station to station, while the correct rate, including collection and delivery, is 41s. 8d. per ton; 8d. per ton being apparently allowed in this case for the two services of collection and delivery.

GENERAL MACHINERY from Leeds to Newcastle.—The export rate is 12s. 6d. per ton, including both collection and delivery, but 11s. 6d. is shewn on page 33 of report; that is, 1s. per ton only has been deducted for the two services of collection and delivery. ⁽¹⁾

⁽¹⁾ Some difficulty has been experienced in checking the rates contained in Sir B. Samuelson's report owing to the distances not being given, and from the name of the district being used instead of the names of the places between which the rates are shewn. For instance, although the South Wales Coalfields extend over a very large area, a rate of 7s. 3d. per ton for cooke is referred to as from "South Wales to Darlaston," on page 24 of the

These errors make many of the comparisons valueless.

A still graver error has been repeatedly committed. Notwithstanding the remark (page 19) that the cost of collection and delivery has been deducted, Sir B. Samuelson has in numerous cases assumed British rates, which include either collection or delivery, and in some cases both those services, to be station to station rates, and compared them as such with station to station rates on the foreign lines. Here are a few examples of this class of mistakes.

GENERAL MACHINERY.—Leeds to Hull, the export rate of 12s. 6d. per ton is shown on page 33 as station to station, whereas it includes both collection and delivery.

Though all the following rates for **BUTTER** include collection and delivery, they are shewn on pages 38 and 39 as station to station, viz. :—

					s.	d.	
Hull to Manchester	...	...	...	...	21	8	per ton,
„ Birmingham	...	...	...	...	21	8	„
„ Leeds	...	...	...	...	13	4	„
Newcastle to Manchester	...	...	...	...	23	4	„
„ Birmingham	...	...	...	...	21	8	„
„ Leeds	...	...	...	...	14	2	„

An unfortunate omission may be mentioned. In some cases there are alternative rates on the English railways, *i.e.*, a higher rate when the company undertakes the risk of conveyance, and a lower rate when the risk is borne by the owner. In no single instance has Sir B. Samuelson taken in his comparisons the lower owner's risk rate chargeable at the option of the consignor. Yet in Holland, for instance, the goods are carried practically at the risk of the owner. On some goods no compensation for damage or delay is payable, while on the others the compensation is limited, in some cases, to simply a return of a portion, or, at the utmost, the whole of the freight. We give a few examples of this class of errors.

report; and in like manner on pages 27 and 28 the rates for pig iron are given as from "Cleveland and Northamptonshire."

The rate for iron wire packed from Birmingham to London is shown on page 29 as 24s. 4d. per ton station to station; there is no reference to the fact that there is an owner's risk rate of 19s. 2d. per ton, collected and delivered.

In like manner the rates for agricultural implements shown in the first column of the following table are given on pages 33 & 34 of the report, although there are the special rates shown in the other columns, all notice of which has been omitted.

AGRICULTURAL MACHINES.

FROM	TO	Rates per ton in report reduced to station to station.	SPECIAL RATES.		
			Agricultural Engines, Steam Ploughs, &c., station to station.	Machines in cases and iron harrows collected and delivered.	Machines not in cases at owner's risk collected and delivered.
		per ton.	per ton.	per ton.	per ton.
Banbury	London ...	25/2 to 32/-	14/8	24/2	25/- to 29/7
„	Lynn ...	28/8 „ 34/6	19/8	26/8	27/1 „ 32/1
„	Shrewsbury	25/4 „ 30/4	16/2	23/4	24/2 „ 28/4
„	Liverpool...	35/4 „ 43/8	*28/6	*31/8	*32/6 „ 39/7
„	Bridgwater	31/6 „ 40/4	24/-	29/2	31/3 „ 36/8
Bedford	London ...	18/8 „ 22/-	11/-	17/6	18/4 „ 21/3

* Collection in Banbury, and delivery alongside ship in Liverpool in 10 ton lots.

These are not the only misleading omissions; it is incumbent to mention others not less important.

In Holland bulky articles pay double the fast goods or ordinary goods rates, or as for a minimum truckload of 5,000 or 10,000 kilogrammes respectively. An actual instance of a consignment from Rotterdam to Munich will illustrate the system:—2 machines and 7 packages of appurtenances, the

actual weight of which was 6,762 kilogrammes (6 tons 13 cwt.) were charged as for 10,000 kilogrammes (9 tons 16 cwt. 3 qrs.) under the conditions of special tariff No. 3. This special rate is ignored.

In almost every instance, Sir B. Samuelson has taken the lowest rates in Germany, Belgium and Holland, which are applicable only to full truckloads of 5 and 10 tons, and in some cases, viz., Belgium, to a minimum weight of 8 cwt. These he has used for the purpose of comparison with English rates for any quantities over 500 lbs.

The rate for hardware from Birmingham to Newcastle for export—206 miles—is 27s. 6d. per ton, including collection and delivery, but it is shewn as 25s. 6d. per ton, station to station, overlooking the special owner's risk rate of 25s. per ton, which also includes collection and delivery. The German rate for the same distance (331 kilometres) is incorrectly given as 18s. 7d. per ton; the lowest station to station rate is 19s. per ton for full truckloads of not less than 5 tons, the rate for smaller quantities, including collection and delivery, being 45s. 2d. per ton.

In Belgium again, the station to station rate of 16s. 11d. per ton (which should be 19s. 4d.) is for a minimum of 8 cwt., the rate, including collection and delivery for the same minimum, being 24s. 3d. per ton.

The Dutch station to station rate of 14s. 10d. per ton (which should be 15s. 7d.) is for full truck loads of not less than 5 tons, the rate, including collection and delivery for any quantities, being 30s. 4d. per ton.

In the German tariff the rate is 2.15d. per ton per mile for goods of every description in lots of less than 5 tons, with a lower tariff divided into six classes for goods in full truckloads of 5 and 10 tons. The latter have been compared with the rates on English railways applicable to consignment of 500 lbs. and over, or of 2 tons. The higher foreign tariff for such traffic, in like circumstances, is not shown. To arrive at a proper comparison, the English rate should, in many instances, have been compared with the rates charged for "*Eilgut*" (or fast goods service) on the continental lines. Of course, the general public in Holland and Germany cannot avail themselves

of the rates for 5 and 10 ton lots. They must deal with carriers or forwarding agents, who perform many of the services included in the rates on English railways, and who fill up, or partially fill up, truckloads. The agents who pay the railway transit charges are free to make their own charges to the public without limitation. What would be instructive—what, however, is not supplied—would be a comparison between what is actually paid in England, and what the majority of the public pay in Germany; it is of little interest to know *what the carriers or forwarding agents pay* to the railway companies. The comparison, such as it is, does not show the rate of conveyance per ton, because the carriers have to pay as for five or ten tons, even if that quantity is not in a wagon. They must make charges to the public beyond the ordinary profits to cover deficiencies in the loads per wagon, as well as for all the services performed by them. (¹)

In some instances, Sir B. Samuelson has not included in the foreign rates the charge for loading and unloading. Bar-iron is a case in point. In every other case he has omitted to include in those rates the charges for weighing, counting, labelling, booking, use of cranes, and advice of arrival of goods—all of which are authorised additional charges beyond the tariff rates. In this country, as is well known, such services are included in the collected and delivered railway rates. (²)

(¹) The observation made in the report that the higher rates in Germany are avoided by the intervention of forwarding agents, who collect from small consignees, and make up the minimum load, charging somewhat higher rates than for 5 or 10 ton lots, shows that it was seen that, although the comparison of British rates is made with them, the general public cannot obtain the advantage of the low rates, because of the heavy minimum quantities.

(²) The following are the charges authorised to be made for such services in addition to the mileage rate and terminals in Germany, Holland, and Belgium :—

Such are some examples of the errors vitiating the comparison. We have by no means exhausted them; they might be greatly multiplied. It is not intended to suggest that Sir B. Samuelson has been more inaccurate than other critics. On the contrary, his report, notwithstanding its inaccuracies, shows that a considerable amount of labour has been expended in endeavouring to obtain the information. It is a favourable specimen of such criticisms, and for this reason it is deserving of notice. It is, of course, difficult for any person, even when practically acquainted with railway business, to appreciate the practical effect of the different conditions under which traffic is carried on Foreign and English railways. It is not surprising

	GERMANY.	HOLLAND.	BELGIUM.
Counting	1·2d. per 20 pieces. 1s. 0d. per truck minimum. 3s. 0d. per truck maximum.	0·2d. per package.	1d. per ton.
Weighing	Stückgut 0·6d. per 2 cwt. Wagon Loads 0·48d. per 2 cwt. if each piece is weighed separately; 1s. 0d. per truck.	from 0·2d. to 0·6d. per 2 cwt.	5d. per ton
Booking ...	...	...	2d. per consign- ment.
Labelling ...	0·6d. per piece.	0·6d. per package.	2d.
Stamping ...	...	1·2d. each note.	...
Use of Cranes ...	0·36d. per 2 cwt. 9d. minimum.	10d. to 1s. 8d. per ton.	3d. per ton.
Advice of Goods	About ½d.	1d.	1d.
Tarpaulins ...	2s. 0d. each.	2s. 8d. each.	1s. 7d. each.
Disinfecting ...	1s. per truck.	1s. per truck.	1s. per truck

that Sir B. Samuelson has evidently not become fully acquainted with all the conditions of carriage, or that he has omitted to give them their proper value in the tables which he has prepared. Unfortunately, owing to the omissions, the conclusions which he draws are, in some cases, erroneous, and in others misleading.

APPENDIX II.

COMPARISON OF RAILWAY RECEIPTS FROM MERCHANDISE
AND MINERAL TRAFFIC.

It may be useful to enquire how far it is true that the heavy trades of coal and iron, or the general trade of the country, are being "slowly, but surely killed by high rates and tolls," or otherwise. That trade in all countries is subject to fluctuation is undoubted, and the causes are many and various. The conveyance of minerals and goods upon the railways of the United Kingdom is one test. Let us take periods of three years:—

RAILWAY RECEIPTS IN UNITED KINGDOM.

Average per Year.

Years.	For minerals.	General merchandise.
1875 to 1877 ...	£13,560,096	£18,922,238
1878 „ 1880 ...	13,891,326	19,181,927
1881 „ 1883 ...	15,742,615	20,801,075
1884 & 1885 { 2 years of depression }	15,387,443	20,631,066

According to the test of railway receipts for conveyance of minerals and goods, the killing process seems very slow indeed, and it is not even sure, because in 1885 the railway receipts for minerals were in some instances reduced. The average receipts for minerals were about $2\frac{1}{2}$ per cent. less on the average of the past two years as compared with those of the previous three years. In the case of goods traffic this percentage was only 0·82 per cent. But, as against the above average receipts for

1884 and 1885, let us place the average for the preceding nine years. For minerals, £14,898,012; for goods, £19,635,080, which shows an increased receipt on the average of the past two years—on minerals of £989,431; on goods of £995,986. Certainly these results are the reverse of decay in traffic or trade.

Another and better test is the tonnage of minerals and goods conveyed on the railways of the United Kingdom for the like period.

Years.	Minerals. Tons.	Goods. Tons.
1875 to 1877, average ...	141,910,505	64,094,565
1878 „ 1880 „ ...	152,528,097	65,548,450
1881 „ 1883 „ ...	182,310,041	74,204,559
1884 „ 1885 „ ...	183,696,151	74,612,020

This test contradicts the theory of decaying trade in an unmistakable manner, but it may be urged that these averages are insufficient to show the great depression in 1885. The fact is, that in 1885 there was a larger tonnage of minerals conveyed than in any year, with the exception of 1883, and a larger tonnage of goods than in any year except 1882, 1883 and 1884.

But a third test, that of production, may be applied. In 1884, the quantity of coal raised in the United Kingdom was 160,758,000 tons.
and in 1885... .. 159,351,000 „

Decrease... .. 1,407,000 tons.

or about '88 per cent.

In 1884 the tonnage of iron ore raised was 16,138,000 tons,
And Iron Ore imported 2,730,800 „

18,868,800 tons.

In 1885, 15,418,000 tons of Iron Ore were raised

Add 2,822,600 „ imported.

18,240,600 „

being a decrease of 628,200 tons, or a decrease of 3.33 per cent.

In 1883, the quantity of pig iron produced in Great Britain was	8,529,000 tons.
„ 1884	7,812,000 „
„ 1885	7,415,000 „

The fact is, that 1883 was an exceptional year. The tonnage of minerals conveyed by railway in 1883 was 8,075,101 tons greater than in 1882, 13,451,612 tons greater than in 1881, and 23,815,308 tons greater than in 1880.

And in like manner the tonnage of general merchandise conveyed in 1883 was 2,192,034 tons in excess of 1882, 5,886,356 tons in excess of 1881, and 7,262,031 tons in excess of the tonnage of 1880.

The production of pig iron is not a real test, inasmuch as large stocks accumulate at certain periods, and the ratio of production is lessened in order to reduce the quantity in stock.

No doubt depression of trade may arise from lower prices. The years 1876 and 1877 were probably those during which the highest possible prices ruled for coal, iron, &c. What were the quantities conveyed by railway?

		Minerals.			Merchandise.
		Tons.			Tons.
In 1875	...	137,087,713	...		62,981,938
„ 1876	...	141,779,393	...		64,185,671
„ 1877	...	146,864,410	...		65,116,085
„ 1880	...	165,670,304	...		69,635,325
„ 1883	...	189,485,612	...		76,897,356
„ 1885	...	183,776,745	...		73,511,709

If lower prices now rule, it is clear there is a very much larger volume of trade now than in the years of high prices. That there has been depression in some branches of the trade of the country may be a fact, but it is only natural to overrate and overstate its reality and importance, and to cast blame upon the wrong parties.

APPENDIX III.

TARIFFS AND CONDITIONS FOR THE CONVEYANCE
OF MERCHANDISE TRAFFIC.

HOLLAND.

THERE is no scale of rates universally chargeable in Holland ; each railway company is authorised by the Concession under which the railway was constructed to charge certain specified rates. The rates actually charged are, as in England, generally lower than the maximum, and they are controlled by the State.

Although the same maximum rates do not govern all the railways in Holland, and the classifications also vary, the basis of a mileage scale is practically the same throughout, viz. :—a rate per kilometre and per ton according to distance, and a fixed charge for Station terminals according to class. The terminal charges on Fast and “Piece” (ordinary) goods include loading and unloading, but in the wagon load classes the terminals do not include those services.

The tariff for the conveyance of through Goods Traffic—*i.e.*, traffic exchanged between all Dutch Railways—is divided into the following classes, viz. :—

1. Fast Goods, carried by ordinary Passenger Trains.
2. “Piece” (Ordinary) Goods, or consignments under 5 tons carried by Goods Trains.

3. Truck loads—Classes A, B and C.

Mileage rates per kilometre and per ton of 1,000 kilos.:—

DISTANCES.	Fast Goods.	Ordinary Goods less than 5 tons.	Truck Loads.		
			Class A.	Class B.	Class C.
1 to 50 kilometres ...	Cents. 0.10	Cents. 0.06	Cents. 0.04	Cents. 0.03	Cents. 0.02
51 to 150 „ ...	0.09	0.05	0.03	0.02	0.01
151 to 250 „ ...	0.08	0.04	0.02	0.01	0.01
251 and upwards ...	0.07	0.03	0.01	0.01	0.01

NOTE.—One cent. per 1,000 kilogrammes per kilometre equals 0.327d. per ton per mile.

Terminal charges per 1,000 kilos. :—				s. d.
Fast Goods ...	Fl. 2.50	{ Including loading and unloading }	(4/2)	
Ordinary Goods ...	„ 1.50		(2/6)	
Class A. ...	„ 0.90		(1/6)	
„ B. ...	„ 0.80		(1/4)	
„ C. ...	„ 0.70		(1/2)	

Consignments of Fast Goods and Piece Goods weighing less than 50 kilos. (1 cwt.) are charged as for 50 kilos.—the minimum charge per freight note being 60 cents. (1s.) by Fast Train; 30 cents. (6d.) by Goods Train.

To the “Ordinary Goods” class belong all goods in lots of less than 5 tons carried by Goods Train; to the “Truck Load,” class A—all goods in 5 ton lots, or paying as for 5 tons, which, according to the classification, do not belong to classes B or C. Classes B and C comprise Truck Loads of 5 and 10 tons respectively of such goods as are specified in the classification.

On the DUTCH STATES AND CENTRAL RAILWAYS the mileage

rates for local traffic are the same as the foregoing scale for through traffic; but the terminals vary as under :—

		Terminals per Ton of 1,000 Kilos.	
Fast Goods ...	Fl. 1.40	{ including loading }	(2/4)
Ordinary Goods...	„ 0.90	{ and unloading }	(1/6)
Class A...	„ 0.70		(1/2)
„ B....	„ 0.70		(1/2)
„ C....	„ 0.70		(1/2)

On the HOLLAND RAILWAY the mileage rates and the terminals for local traffic are as follows :—

	Mileage Rates per Ton, and per Kilometre.	Terminals per Ton of 1,000 Kilos.	
Fast Goods ...	Fl. 0.08	Fl. 1.20	{ Including loading and unloading } (2/-)
Ordinary Goods ..	„ 0.05	„ 1.20	{ „ „ „ } (2/-)
Class A. ...	„ 0.02½	„ 0.80	(1/4)
„ B. ...	„ 0.02	„ 0.80	(1/4)
„ C. ...	„ 0.013	„ 0.70	(1/2)

On the DUTCH RHENISH RAILWAY the following are the mileage rates charged :—

	FAST GOODS.	GENERAL GOODS.		BULK GOODS.				SPEC'L CLASS.
		I.	II.	A.	B.	C.	D.	
Rate per Kilometre	* cts. 13·3	(Per 1000) cts. 6·7	cts. 5·3	Kilogr cts. 4	mme cts. 3·3	in (cents.) cts. 2·7	cts. 2	cts. 1·3
Terminals ...	fl. 1·20	60	60	60	60	60	60	72
			(In English Money.)					
Rate per mile	d. 4·28	d. 2·156	d. 1·7	d. 1·288	d. 1·056	d. 0·87	d. 0·64	d. 0·418
Terminals ...	s. d. 2 0	s. d. 1 0	s. d. 1 0	s. d. 1 0	s. d. 1 0	s. d. 1 0	s. d. 1 0	s. d. 1 2·5

* The terminals for Fast, and General Goods Classes 1 and 2, include loading and unloading.

NOTE.—By agreement the Holland Railway Company are bound to adopt the same basis as the local rates on the States Railway, unless their own scale is lower.

The tariff of the DUTCH RHENISH RAILWAY is divided into the following classes :—

(a) Fast goods, which are usually forwarded by mixed Goods and Passenger trains and by Fast Goods trains.

(b) General Goods in quantities of less than 5 tons not mentioned in the classification as belonging to another class. (Class I.)

(c) General Goods in quantities of less than 5 tons which pay less according to classification. (Class II.)

Goods of these two Classes in lots of at least 5 tons pay the rate of Class A.

(d) Bulk Goods which in quantities of at least 5 tons, or quantities which are charged as if for that weight, are carried at reduced rates. These are sub-divided into Classes A, B, C and D. Goods belonging to Class A, in quantities of 10 tons in one truck are carried at the rates of Class B.

(e) Special class—Goods which in consignments of 10 tons, or paying for that weight, are carried at special reduced rates.

Goods in the Special Class must be in lots of 10,000 kilos. (10 Tons.) If a consignment weighed 11,000 kilos., the first 10,000 kilos. would be charged at the Special Rate, and the remaining 1,000 kilos. at the rate for Class I.

Goods in classes A, B, and C, are only charged at those rates if the consignments exceed 5 tons.

Goods belonging to Classes B, C, and D, and to the Special Class are carried in open wagons, the railway not being compelled to provide covers; but the consignor may cover the trucks *at his own expense and risk*, or give instructions in the freight-note for having the goods rated according to Class A, in which case they are treated in the same manner as goods belonging to that class. An exception is made, however, in the case of

those goods which, according to law, must be carried in open trucks.

The consignor may also give directions that the goods belonging to Class A are to be carried at the rates of Class B, in which case they are conveyed in open trucks. Those goods, which although paying the rates of Class A, must be carried in open trucks, are excluded from this regulation.

At the special request of senders, tarpaulins are supplied by some of the railway companies, if there are any available, upon payment of fl. 1.60 (2s. 8d.) each, for distances up to 225 kilometres, with an additional charge of fl. 0.80 (1s. 4d.) for each additional 225 kilom. The DUTCH RHENISH and HOLLAND RAILWAY COMPANIES do not supply tarpaulins under any circumstances.

The railway companies undertake no responsibility whatever for damage arising from goods being carried in open trucks.

The following charges are allowed by law in addition to the foregoing rates and terminals: and with few exceptions they are the same on all railways.

For loading or unloading goods carried under the conditions of the truck load classes, if the service is performed by the railway company—

DUTCH STATES AND CENTRAL RAILWAYS, 5d. per ton.

HOLLAND RAILWAY, 4d. per ton for ordinary sized goods, for articles weighing 1 ton or more 1s. 2d. per ton.

DUTCH RHENISH Railway, 4d. per ton.

Goods which are of unusual size or weight, or for the loading and unloading of which special arrangements have to be made, must always be loaded and unloaded by consignor or consignee at their own cost and risk.

For the use of cranes and other hoisting tackle, when the owner of the Goods finds the labour, the following are the charges :

DUTCH STATES AND CENTRAL RAILWAYS, 10d. per ton.

DUTCH RHENISH RAILWAY.

		Per ton for loading or unloading	
		s.	d.
For articles weighing 1 to 5 tons	...	0	10
5 to 10 "	...	1	3
10 to 12 "	...	1	8

For tipping coals in quantities of—

100 tons and above	...	1d 6 per ton.
50 to 100 tons	...	1d.8 "
Up to 50 tons	...	2d. "

On the STATES RAILWAY the charge is reduced to 1d.2 per ton if 20,000 tons per year are tipped.

For counting general goods—Per package, 0d.2, with a minimum of 1d.2.

The HOLLAND RAILWAY COMPANY make no charge for counting ordinary goods, but for truck loads they charge 1d.2 per 10 packages, with a minimum of 1s. per truck load.

For stamping duplicate freight note—1d.2 each.

The STATES, CENTRAL AND HOLLAND RAILWAYS make no charge.

For delivery of general goods—

- (a) Under ordinary circumstances 1d. per cwt., with a minimum charge per consignment of 6d.

- (b) Under unusual circumstances, such as closed water, snow in street, etc., 2d. per cwt., with a minimum per consignment of 1s.

For collection—

- (a) Under ordinary circumstances 1d. per cwt., with a minimum charge per consignment of 10d.
(b) Under unusual circumstances 2d. per cwt., with a minimum charge per consignment of 1s. 8d.

The HOLLAND RAILWAY COMPANY make charges for collection and delivery varying according to the Station.

The DUTCH RHENISH RAILWAY COMPANY raise the charge only under unusual circumstances.

For advising the consignee of the arrival of his goods a charge of 1d. is made in all cases, except—

- (a) In the case of goods to be called for ;
(b) If consignee signs an agreement releasing the Company, not only from advising arrival, but also from all responsibility for detention of goods arising from notification of arrival not having been made.

The HOLLAND RAILWAY COMPANY charge 0d.6 if the advice is sent by post.

LABELLING.—All goods in consignments of less than 5 tons must be labelled or marked with the name of the receiving Station. If the goods are tendered without this having been done, a charge for labelling of 0d.6 per package, with a minimum of 2d.4 is made by the Company. The HOLLAND RAILWAY COMPANY do not show any such charge in their rate book.

COMMISSION FOR COLLECTING PAID-ONS.—A commission of 1% with a minimum of 1d. for ordinary paid-ons, and $\frac{1}{4}$ %, for amounts paid for duty, &c., and for all costs incurred in connection with the last-named, is charged.

WAREHOUSE RENT.—All goods other than truck loads which are left till called for, are subject to the following charges if they are not taken away within 24 hours after receipt of advice of arrival:—

	Dutch Rhenish per 2 cwt.	Dutch States and Central.	Holland.
(a.) If warehoused in the sheds per day ...	1d.2	0d.4	1d.2
With a minimum of	2d.4	2d.	4d.
(b.) If left in the Company's yard per day	0d.6	0d.2	0d.6
With a minimum of	2d.4	2d.	4d.

DEMURRAGE.—If trucks are not unloaded within eight hours after receipt of the notice of arrival a charge is made of 2d.4 per hour and truck, with a minimum of 1/-; or the Company may unload the goods at the owner's expense, and warehouse them, charging rent.

The same amount of demurrage is charged if the trucks, which are to be loaded by consignors themselves, are not ready within the appointed time. If the consignor receives notice that the trucks are at his disposal in the morning, the loading must be effected on the same day; if notice is given in the afternoon, the loading must be over before 2 p.m. on the day following.

WEIGHING.—On the DUTCH RHENISH RAILWAY a charge of 0d.6 per 2 cwt., with a minimum of 1d.2 for each item included in the freight-note, is made for weighing. On the DUTCH STATES and CENTRAL RAILWAYS the charge is 0d.2 per cwt., with a minimum of 4d. per consignment, and on the HOLLAND RAILWAYS 0d.8 per 2 cwt. with a minimum of 4d.

(a.) If the goods are weighed at the request of the consignor or consignee.

(b.) If the weight is not given in the freight note, but has to be filled in by the Company.

(c.) If the Company load the goods on behalf of consignor.

If the goods are weighed in full truck loads, the charge on the DUTCH RHENISH RAILWAY is 3d. per ton on the net weight; on the DUTCH STATES, CENTRAL AND HOLLAND, 2s. If each article is weighed separately the charge is 0d.5 per 2 cwt.

TIME ALLOWED BY LAW FOR TRANSPORT.—The time occupied by the conveyance of goods, carriages, &c., may not exceed the following maxima, which are in force on all the Dutch Railways, and also on all the Railways forming part of the German Union:—

(a) Express Goods—

1. Time for forwarding 24 hours.

2. Time for conveyance for each 186

miles or part thereof 24 „

(b) General Goods—

1. Time for forwarding 48 „

2. Time for conveyance—

(a) For distances up to 62 miles 24 „

- (b) For each 124 miles, or part thereof, above 62 miles 24 hours.
- (c) Horses, cattle, or other large animals—
- (a) If carried by Passenger Train—
1. Time for forwarding 24 „
 2. Time for conveyance for each 186 miles or part thereof 24 „
- (b) If carried by Goods Train—
1. Time for forwarding 48 „
 2. Time for conveyance for each 186 miles or part thereof 48 „

The time allowed for forwarding may only be reckoned once, irrespective of the number of railways over which the goods have to pass. On occasions of pressure of traffic caused by fairs, closed water, &c., these limits may be extended by the Minister of Railways. The time allowed for transport commences at the midnight following the stamping of the freight note, and it is not exceeded if the goods are delivered to consignee before the prescribed time has expired, or, in the event of the goods not having to be delivered, if notice is given in writing to consignee of their arrival before the expiration of the prescribed time.

AMOUNT TO BE PAID BY THE COMPANY IN CASE THE TIME ALLOWED BY LAW IS EXCEEDED, AND NO VALUE IS INSURED.

(a) For General Goods, if the delay amount to more than 24 hours; or in the case of horses and other animals to more than 48 hours: up to 72 hours, $\frac{1}{4}$ of the freight; up to 8 days $\frac{1}{2}$ of the freight; beyond 8 days, $\frac{1}{2}$ of the freight.

(b) For Express Goods: beyond 12, and up to 24 hours, $\frac{1}{4}$ of the freight; up to 3 days, $\frac{1}{2}$ of the freight; beyond 3 days, $\frac{1}{2}$ of the freight.

(c) For Parcels: beyond 6, and up to 12 hours, $\frac{1}{4}$ of the freight; up to 24 hours, $\frac{1}{3}$ of the freight; beyond 24 hours, $\frac{1}{2}$ of the freight.

INSURANCE.—A premium is charged for insurance if the declared value of the goods, cattle, &c., exceed that allowed by Article 33 of General Regulations, as compensation in case of damage or loss.

The value allowed is £25 for a horse, £10 10s. for a fat ox, £7 10s. per head for other cattle, £1 for a calf, £3 for a fat pig, £1 5s. for a lean pig, 13s. 4d. for a sheep or goat, 7s. 8d. for a dog, and £1 10s. per cwt. for other animals. If the value exceeds these sums, and the consignor wishes to insure such value being paid to him in case of damage, the premium is 1 per 1,000 of the sum insured for every 93 miles with a minimum of 4d.

The maximum value allowed for carriages and carts, including the articles placed in them, is £42. If the value exceeds that sum the premium payable is the same as for animals, with a minimum of 3d.

The value allowed for goods is assumed by law not to exceed £2 10s. per cwt. (30 fl. per 50 kilos). In case of whole or partial loss, the commercial value of the goods—which has to be proved—is taken as a basis. In the absence of data for arriving at the commercial value, the value which similar goods would have at the time and place of delivery is taken as the standard, deducting the amount of duty and other costs not paid owing to loss. If the goods are insured, the premium payable is one-tenth per 1,000 of the value declared, for each 93 miles (parts of that distance reckoned as 93 miles), with a minimum of 2d.

In case of wilful misconduct on the part of the Company or their servants, the liability is not limited to the normal or declared value.

To recover from the Railway Company the full amount of damage sustained, if delivery is not effected within the time allowed by law, the following premiums have to be paid :

For horses and other animals 0·2d. per 9 miles and £8. 6s. 8d., parts of this distance and amount reckoned as 9 miles and £8. 6s. 8d., with a minimum of 3d. ;

For carriages, carts, &c., 0·4d. per 9 miles and £8. 6s. 8d., with a minimum of 3d. ;

In respect of goods for the first 94 miles, 1 per 1,000 of the sum declared ; for the following 140 miles, not more than $\frac{1}{2}$ per 1,000 ; for each succeeding 234 miles, not more than $\frac{1}{2}$ per 1,000, with a minimum of 2d., parts of 94, 140, and 234, reckoned as 94, 140, and 234. This premium is charged per each 10fl. (16s. 8d.) of the declared value.

ON the STATES, CENTRAL and HOLLAND RAILWAYS bulky goods, consisting of such goods as come in the classification under special tariff No. 1, or are enumerated in the rate book, are charged double the fast goods or piece goods rates, as the case may be, unless it is more advantageous to pay as for 5 tons at class A rate.

Grain, vegetables, meal, seed, and the like, which are classified under special tariff No. 2, are carried in box or covered trucks at the rates of class B.

ON the DUTCH RHENISH RAILWAY bulky goods (*i.e.*, goods weighing less than 340 lbs. per cubic yard) and goods of unusual weight, the size of which does not admit of their being passed through the door of an ordinary covered truck (5 ft. 3 in. by 5 ft.), will not be carried in consignments of less than one ton, unless the freight for this weight, with a minimum of 4s. 2d. is paid, provided the conveyance can take place without an extra truck being necessary. Articles which prevent space

being occupied by other goods are charged for at the rate of 340 lbs. per cubic yard occupied.

For articles totally unsuitable for loading with others, the freight for at least 5 tons must be paid for each truck used.

If a single consignment of bulky goods occupies less than 35 cubic feet, double freight is charged for the actual weight. An ordinary covered wagon is assumed to be capable of containing goods weighing at least four tons; the freight, therefore, for this weight must be charged for each wagon used.

CATTLE RATES.—The rates for through cattle traffic from a Station of one Railway to a Station of another Railway in Holland, are, if carried by Goods Train, as follows.—

(a) For large cattle (oxen, cows, large calves, heifers, horses, donkeys, and foals) fl. 0.12 per square metre truck room per 10 kilometres (2½d. 6.21 miles with fl. 5 (8s. 4d.) terminals for all trucks of all sizes.

The size of the trucks being from 12 to 18 square metres (about 14½ to 21½ square yards).

For a truck of 15 square metres (about 18 square yards) for a distance of 108 kilometres (67 miles) the charge would be—

Mileage rate	...	fl. 19.44	32s. 5d.
Terminals...	...	fl. 5	8s. 4d.
Disinfecting	...	fl. 0.60	1s. 0d.
		<hr/>	<hr/>
		fl. 25.04	41s. 9d.
		<hr/>	<hr/>

(b) For small cattle (pigs, small calves, sheep, goats, &c.) the rates are :—

Fl. 0.09 (1d.8.) per square metre per 10 kilometres if carried in trucks with one floor.

Fl. 0.15 (3d.) per square metre per 10 kilometres if carried in trucks with two floor stages, with fl. 5 (8s. 4d.) terminals in every case.

If carried by passenger trains the above rates are increased by one-third.

In addition to the rates a charge of fl. 0.60 (1s.) per truck is made for disinfecting the wagon.

There are no rates per head for through traffic between the various railways of Holland, except between the DUTCH RHENISH and DUTCH CENTRAL RAILWAYS. If, for instance, a cow is carried from a Station on the STATES RAILWAY to a Station on the DUTCH RHENISH RAILWAY, the charge would be as for a full truck, unless it would be cheaper to charge the consignment from Railway to Railway at the local rates. In the case of traffic between the DUTCH RHENISH and CENTRAL RAILWAYS, for which traffic rates per head exist, the following rates would be charged (by goods train only):—

With a minimum of
fl. 4 (6s. 8d.)
per consignment.

From the Hague
to Amersfoort, 83 kilo-
metres (51 miles) per cow fl. 1.29 (2s. 2d.)

From the Hague
to Amersfoort, 83 kilo-
metres (51 miles) per sheep fl. 0.33 (6½d.)

From the Hague
to Amersfoort, 83 kilo-
metres (51 miles) per horse fl. 1.90 (3s. 2d.)

From Rotterdam
to Zwolle, 142 kilo-
metres (88 miles) per cow 3.14 (5s. 3d.)

With a minimum of
fl. 4 (6s. 8d.)
per consignment.

From Rotterdam
to Zwolle, 142 kilo-
metres (88 miles) per sheep ... 0.80 (1s. 4d.)

From Rotterdam
to Zwolle, 142 kilo-
metres (88 miles) per horse ... 4.15 (6s. 11d.)

For local traffic on the DUTCH STATES RAILWAYS, rates per head and per truck load exist. Such rates per head are only available per goods trains; full truck loads are carried by passenger train.

I.—BY GOODS TRAINS.

(a) For full truck loads 1 cent. per square metre per kilometre, with terminals fl. 5 (8s. 4d.) (irrespective of size of truck). No difference is made for large or small cattle.

The charge for a truck of 15 square metres for 108 kilometres (67 miles) would be—

Mileage rate	...	fl. 16.20	27s. 0d.
Terminals	...	fl. 5	8s. 4d.
Disinfecting	...	fl. 0.60	1s. 0d.
		<u>fl. 21.80</u>	<u>36s. 4d.</u>

The rate per head for 124 kilometres (77 miles)—

Per cow	...	...	fl. 2.88 (4s. 9½d.)
„ sheep	...	...	„ 0.72 (1s. 2½d.)
„ horse	...	...	„ 3.70 (6s. 2d.)

With a minimum of—

Up to 100 kilometres	...	...	fl. 2.0 (3s. 4d.)
„ 200 „	...	...	„ 3.0 (5s. 0d.)
Above 200 „	...	...	„ 4.0 (6s. 8d.)

BELGIUM.

THE basis on which the rates are fixed in Belgium is :—

- (a) A fixed charge of one franc per ton, irrespective of distance, which is practically equivalent to a structural terminal charge for the use of stations and for clerkage.
- (b) A mileage scale, graduated according to distance.

On all lines worked by the State, whether constructed by it, purchased by, or the subject of a concession, the local tariff of the State Railways is applied generally. Before 1884, the Grand Central Belge had a distinct classification and a tariff of rates on the whole higher than that of the State Railways, but the rates charged on the independent lines are now based on those adopted by the State Railways, and sanctioned by the Minister.

The rates for traffic with France are framed by assimilating the Belgian to the French scale, based on the shortest route ; for certain important kinds of traffic there are exceptional tariffs, by which each Company make a reduction from their ordinary rates.

In addition to the weight and distance, the value, and bulk of the goods are taken into consideration in the classification, if it can be said that any classification exists.

The tariff of the State Railways contains a classification which divides the *Petite Vitesse* goods into four classes. Besides these, twenty special tariffs have been adopted.

THE FOLLOWING STATEMENT SHEWS THE BASIS OF THE TARIFFS FOR LOCAL AND INTERCHANGED INLAND TRAFFIC EXISTING ON THE 1st JANUARY, 1886,
DIVIDED INTO GENERAL AND SPECIAL TARIFFS:—

A.—LOCAL TARIFFS.

UNIFORM RATES IN FRANCS FOR PARCELS BY PASSENGER AND GOODS TRAINS, FOR
“BULLION” BONDS, &c.

DISTANCES.	No. 1 Tariff. Parcels by Passenger Train.		No. 2 Tariff. Parcels by Goods Train.		No. 4 Tariff. Bulln., Bnds., &c., by Passngr. Train.	
	Prepaid Packages and non- weighing prepaid 5 Kilos and under.	6 to 10 Kilos and non- weighing prepaid 5 Kilos and under.	Over 10 Kilos.	Mini- mum Charge per con- sign- ment.	Mini- mum Charge per con- sign- ment.	Per 1,000 franca.
1 to 25 Kilometres { Uniform Rates .. Delivery at Consignee's Address ..	0.60	0.60	0.70	0.30	0.30	0.20
	0.20	0.30	0.40	0.20	0.30	0.05
26 to 75 Kilometres { Uniform Rates .. Delivery at Consignee's Address ..	0.60	0.70	0.80	0.30	0.40	0.25
	0.20	0.30	0.40	0.20	0.30	0.05
76 Kilometres and over { Uniform Rates .. Delivery at Consignee's Address ..	0.60	0.80	0.80	0.30	0.50	0.30
	0.20	0.30	0.40	0.20	0.30	0.05

RATES IN FRANCS FOR GOODS, CARRIAGES AND HORSES BY PASSENGER AND GOODS TRAINS, AND CATTLE BY GOODS TRAIN.

DISTANCES.	No. 1 Tariff.		No. 2 Tariff.		No. 3 Tariff.				No. 5 Tariff.				No. 6 Tariff.			
	Pass- enger Train.	Goods Train.	Goods Train.				Ordin- ary Passen- ger Train.	Carriages. (Each.)	Horses by ordinary Pas- senger Train. Rate per every 3 heads.	Horses and Cattle by Goods Train.						
			Per 100 Kilogrammes. (1)	Per 100 Kilo- grammes. (2)	Minimum per Consignment.	Per 1,000 Kilo- grammes.				Railway Carriages and Trucks on Wheels. Rate per Carriage or Truck on 2 Axles.	Property of Private Parties. Provided by the Railway.	Furniture Vans per Vehicle.				
													1st Class.	2nd Class.	3rd Class.	4th Class.
1 to 25 kil. per Kilomètre	1.05	0.40	0.40	0.40	1.00	1.00	1.00	0.50	5.00	6.00	7.02	6.00	6.00	3.00	4.50	6.00
TERMINAL CHARGES.																
1 to 25 kil. per Kilomètre	0.03	0.02	0.04	0.10	0.08	0.06	0.06	0.20	0.60	0.702	0.60	0.40	0.12	0.18	0.24	0.24
MILEAGE RATES.																
1 to 25 kil. per Kilomètre	1.05	0.40	0.40	1.00	1.00	1.00	1.00	5.00	6.00	7.02	6.00	6.00	3.00	4.50	6.00	6.00
TERMINAL CHARGES.																
26 to 75kil., extraperkil.	0.03	0.02	0.04	0.10	0.08	0.06	0.04	0.20	0.60	0.702	0.60	0.40	0.12	0.18	0.24	0.24
76 to 100 "	"	"	0.016	0.032	0.08	0.04	0.03	0.02	0.10	0.48	0.5616	0.48	0.32	0.09	0.135	0.18
101 to 125 "	"	"	0.02	0.016	0.032	0.08	0.04	0.02	0.01	0.05	0.48	0.5616	0.48	0.32	0.09	0.135
126 to 150 "	"	"	0.02	0.016	0.032	0.08	0.02	0.01	0.01	0.05	0.48	0.5616	0.48	0.32	0.09	0.135
151 to 200 "	"	"	0.016	0.012	0.024	0.06	0.02	0.01	0.01	0.05	0.36	0.4212	0.36	0.24	0.06	0.09
201 to 350 "	"	"	0.012	0.008	0.016	0.04	0.02	0.01	0.01	0.05	0.24	0.2808	0.24	0.16	0.04	0.06
351 and over "	"	"	0.012	0.008	0.016	0.04	0.02	0.01	0.02	0.05	0.24	0.2808	0.24	0.16	0.04	0.06

(1.) The charge for delivery to domicile is compulsory, and amounts to 3 francs per 100 Kilog.
 (2.) The charge for delivery to domicile is compulsory, and amounts to 30 cents. per 100 Kilog.

B—TARIFF FOR INTERCHANGED INLAND TRAFFIC.

The General Tariff comprises two Standard Scales, viz. :—Scale *A* and Scale *C*.—Scale *A* is the same as the Local Tariff except as regards the 4th Class rates for distances from 1 to 4 kilometres, for which a minimum of 5 kilometres per ton has been fixed.

Scale *C* differs from Scale *A* only by an increase of—Franc 0.10 per 100 kilogrammes on the Tariff Rates Nos. 1 and 2, and Franc 0.10 per 1000 kilogrammes on the rates of Tariff No. 3 ⁽¹⁾ (except in the case of Railway Carriages and Trucks on wheels), which latter charge is credited to the Western of Flanders Railway Company.

⁽¹⁾ The rates for Furniture Vans belonging to private parties represent the charge for 6,000 kilog. at 1st Class. In the case of Furniture Vans provided by the Railway Company, the above mentioned prices are increased by 17 per cent.

The following tables show, in English money, the terminal charge per ton, and the mileage rate per ton per mile :—

TERMINALS.	1ST CLASS.		2ND CLASS.		3RD CLASS.		4TH CLASS.	
	Per 100 kilos.	Per ton.	Per 1000 kilos.	Per ton.	Per 1000 kilos.	Per ton.	Per 1000 kilos.	Per ton.
Station terminals up to 25 kilom. (15 miles)	fc. 1.0	10d.	fc. 1.0	10d.	fc. 1.0	10d.	fc. .50	5d.
Station terminals above 25 kilom. (15 miles)	fc. 1.0	10d.	fc. 1.0	10d.	fc. 1.0	10d.	fc. 1 0	10d.
Loading and Unloading charged in addition	fc. 1.0	10d.	fc. 1.0	10d.	fc. 1.0	10d.	fc. 1.0	10d.

BASIS OF RATES.	1ST CLASS.		2ND CLASS.		3RD CLASS.		4TH CLASS.	
	General goods under 5 tons, minimum charge as for 8 cwt.		5-ton lots.		5-ton lots.		10-ton lots.	
	Per 1000 kilos. per kilom.	Per ton per mile.	Per 1000 kilos. per kilom.	Per ton per mile.	Per 1000 kilos. per kilom.	Per ton per mile.	Per 1000 kilos. per kilom.	Per ton per mile.
miles.	cts.	d.	cts.	d.	cts.	d.	cts.	d.
Up to 25 kilom. (15)	10	1.56	8	1.25	6	0.94	6	0.94
„ 75 „ (46)	10	1.56	8	1.25	6	0.94	4	0.62
„ 100 „ (62)	8	1.25	4	0.62	3	0.47	2	0.31
„ 125 „ (77)	8	1.25	4	0.62	2	0.31	1	0.15
„ 150 „ (93)	8	1.25	2	0.31	1	0.15	1	0.15
„ 200 „ (124)	6	0.94	2	0.31	1	0.15	1	0.15
„ 350 „ (217)	4	0.62	2	0.31	1	0.15	1	0.15
Over 350 „	4	0.62	2	0.31	1	0.15	2	0.31

The foregoing Tariffs do not include the following various additional charges which are authorised and are, in fact, charged over and above the ordinary tariff rates:—

	Tariff No. 1.	Tariff No. 2.	Tariff No. 3.	Tariff No. 4.	Tariff No. 5.	Tariff No. 6.
	Frs. C.	Frs. C.	Frs. C.	Frs. C.	Frs. C.	Frs. C.
Booking per consignment, compulsory	...	...	0.20	...	0.20	0.20
Collection from domicile, per 100 kilos. (1)	0.30	0.30	0.30	...	...	...
Collection from domicile for Bullion per 1,000 francs (£40), with a minimum of 30 cents. (3d.) per consignment	...	...	...	0.15	...	...
Collection of Furniture Vans provided by the Railway ... ..	...	...	10.00	...	...	...
Delivery to domicile per 10 kilos.—						
" „ in Brussels „ „ (1)	...	...	0.05	...	...	...
" „ in other localities „ „ (1)	...	...	0.03	...	...	...
Delivery to domicile after 9 p.m. of Express parcels, per consignment ...	0.25	...	...	...	...	...
Delivery to domicile by Express any distance of prepaid parcels not exceeding 5 kilos. (11 lbs.) any distance within 5 kilometres (3.10 miles) beyond the ordinary radius of delivery	1.00	...	...	...	...	...
Delivery to domicile of Furniture Vans belonging to the Railway ... ..	...	...	10.00	...	...	...
Delivery to consignees' cellars. { Maximum charge per 100 kilos.—						
a Goods in casks (2) ...	0.50	0.50	0.50	...	...	...
b Goods in sacks, cases or baskets (2) ...	0.25	0.25	0.25	...	...	...
Loading and Unloading, per 100 kilos. (1)	...	...	0.10	...	...	...
Numbering of packages, per 100 kilos..	...	...	0.01	...	...	...
Postage for the advice of goods consigned to wait at the Station ...	...	...	0.10	...	...	...

(1). The Rates for these services do not apply to packages weighing more than 500 kilos. (10 cwt.) each.

(2). These Charges must be paid direct to the Carman.

TARIFF No. 1 applies to parcels carried by Passenger Trains, and includes all charges for terminal services and delivery to domicile, but not collection.

Parcels up to 5 kilos. (11 lbs.), the carriage of which is prepaid, are carried at an uniform rate of franc 0.80 (8d.), irrespective of distance, but if the carriage is not prepaid, they are charged as for 10 kilos. (22 lbs.)

Parcels 6 to 10 kilos., whether the carriage is or is not prepaid, are charged as for 10 kilos.

Parcels above 10 kilos. (22 lbs.) and up to 20 kilos., are charged as 20 kilos.; above 20 kilos. fractions of 10 kilos. are charged as 10 kilos.

Parcels of no declared value sent by Passenger Train must in all cases be prepaid.

In towns where there are cartage arrangements, delivery to "domicile" takes place immediately after arrival of the trains up to 9.0 p.m.

Parcels to be delivered between 9.0 p.m. and 7.0 a.m. are charged franc 0.25 extra each parcel.

TARIFF No. 2 applies to packages up to 200 kilos. (4 cwt.) in weight to be forwarded by Goods Train, unless a written order is given for them to be sent by Passenger Train, under conditions of Tariff No. 1, or by Goods Train, under Tariff No. 3.

Prepaid parcels not exceeding 5 kilos. (11 lbs.) are carried at an uniform rate of franc 0.50 (5d.) each parcel, irrespective of distance.

Above 5 kilos. in weight the carriage is charged on the weight of the consignment consisting of one or more packages, any fraction of 10 kilos. being charged as for 10 kilos.

Prepaid parcels of 5 kilos. and less, are delivered to "domicile" on the morning following the day of forwarding, provided they be handed to the Railway at least one hour before the departure of the train. Other packages and goods sent under this tariff

are generally forwarded on the evening of the day they have been accepted. They are delivered to "domicile," in towns where there are cartage arrangements, within six hours of the arrival (night hours excluded), and provided this be not prevented by glut of traffic.

The rates of this Tariff include the loading charges, booking, and delivery to "domicile," but not collection.

TARIFF No. 3 applies to goods traffic, and is divided into four classes according to the nature and value of the goods as well as to other considerations.

All goods not specified are charged at the first-class rate (the highest), with a minimum of 400 kilos. (8 cwt.), as also are all consignments of goods, irrespective of class, the weight of which is less than 5 tons, unless it is more advantageous to pay as for 5 tons at the rate fixed for consignments of that weight. The exceptions are:—Empty vehicles used at fairs the minimum charge for which is as for 4,000 kilos. (4 tons) each. Flax and Hemp (raw), 4,000 kilos. (4 tons) per truck.

The minimum charges for the 2nd and 3rd classes are as for 5,000 kilos. (5 tons), and for the 4th class 10,000 kilos. (10 tons). Consignments under 10 tons are charged 3rd class rate, unless they pay as for 10 tons 4th class. The exceptions are for mining timber, which is charged at 4th Class rate, with a minimum of 5,000 kilos. (5 tons). Above the minimum weights, fractions of 10 kilos. (22 lbs.) are charged as 10 kilos. Goods sent in bulk are accepted only in lots of 5,000 kilos. (5 tons) for the 1st, 2nd and 3rd Classes, and in lots of 10,000 kilos (10 tons) for the 4th Class.

If a consignment, carried under the conditions of Tariff No. 3, consists of goods of different classes, the highest of such classes is charged for the whole consignment.

Goods of the 4th class are carried in open trucks only; but if, at the request of the consignors, they are carried in

box or covered trucks, they are charged at 3rd class rate unless the consignor himself supplies the tarpaulin, or pays for hire thereof at the rate of 2 frs. (1s. 7d.) each. Tarpaulins provided by Consignors are returned free of charge, except 5d. for booking fee.

In the case of a sender requiring three trucks, he must give two full days' notice to the railway of such requirement.

Provided forwarding be not prevented by a glut of traffic, consignments forwarded under this tariff are due at the arriving station three full days after acceptance. Another full day is required if the goods have to be carted to "domicile."

Bulky goods weighing less than 200 kilos. per cubic metre, are charged 50 per cent. in addition to the ordinary rate, with a minimum of 200 kilos. per cubic metre, or half the tonnage capacity of the truck used; the exceptions to the rule being in favour of

1. Flax and hemp, raw, the maximum charge for which is 4 tons for a truck of 10 tons capacity.

2. Eggs, wool (except combed or carded), sheep skins, cotton and wool waste, oakum, flax and waste thereof pressed in bales or bundles, and live plants, which are charged at actual weights.

Goods sent in full truck loads may be loaded and unloaded at option by Senders and Consignees respectively, but if loaded by Senders they *must* be unloaded and carted by Consignees. Consignments under 5 tons and goods insured against damage or loss *must* in all cases be loaded and unloaded by the Railway.

The charge made by the Railway for loading and unloading is 10d. per ton of 1,000 kilos. If cranes or other loading appliances belonging to the Railway are used by Consignor or Consignee, a charge of 3d. per ton is made for their use.

The Railways on demand will verify the weight of the consignment as far as the appliances of the station will admit, a charge of franc 0.05 per 100 kilos. being made if the

difference in the declared weight does not exceed 2 per cent. and the original charges are maintained.

TARIFF No. 4 applies to the conveyance of Bullion, Bonds, Bank-notes, Title Deeds, &c., a false declaration of which, either in regard to weight, value, or nature of contents, is considered a fraud.

Carriage is charged upon 1,000 francs (£40) in value, any fraction of which sum is charged as for 1,000 francs, but if the charge so calculated is lower than it would be under the conditions of Tariff No. 2 the latter will be charged.

Additional services, viz., loading, unloading, booking and delivery to "domicile," are included in the Tariff Rates.

TARIFF No. 5 applies to carriages forwarded by Passenger Train; but at the option of the Sender, Carriages, as also Vans, Carts, Omnibuses, Tramway Cars, Engines and Threshing Machines, can be sent by Goods Train at the 2nd Class rate of Tariff No. 3, the minimum weight being:—

For 1 Vehicle—in pieces or on wheels—on one Truck	2,500 kilos
„ 2 Vehicles „ „ „	4,000 „
„ 3 „ „ „ „	5,500 „
„ 4 „ „ „ „	7,000 „

Vans, Carts, Omnibuses, &c., can also be charged at the 1st Class rate of Tariff No. 3, with 50 per cent. added as for bulky goods, if the latter is more advantageous to the Sender.

Loading and unloading are included in the Passenger Train rate, but are performed at Sender's risk. In the case of Goods Train, those services are performed at the risk and expense of the Owner.

Carriages conveyed in covered Trucks specially provided for such traffic are charged 25 per cent. over and above the Ordinary rates, both by Passenger and Goods Train.

TARIFF No. 6 applies to HORSES, CATTLE AND DOGS. Cattle is carried exclusively by Goods Train; Horses, Colts, Mules and Ponies are admitted for conveyance by Pas-

senger Trains (Express Trains excepted), only in the two following cases, viz. :—

a. When the distance of the journey is 75 kilometres (46 miles) or more.

b. When the departure and arrival stations form the extreme points between which the Train runs

The minimum charge for Horses, Colts, Mules or Ponies by Passenger Train is as for three heads.

The Goods Train rates are divided into three categories, viz. :—

1ST CATEGORY.—One Horse or one Mule, one or two Colts, Ponies, Oxen, Cows or Donkeys, one to five Pigs or Calves, one to ten Sheep, one to thirty Sucking Pigs.

2ND CATEGORY.—Two Horses or two Mules, three or four Colts, Ponies, Oxen, Cows or Donkeys, six to ten Pigs or Calves, eleven to twenty Sheep, thirty-one to sixty Sucking Pigs.

3RD CATEGORY.—Three Horses or three Mules five or six Colts or Ponies, a Truck load* of small or large Cattle, sixty-one to one hundred Sucking Pigs.

Colts or Ponies exceeding 1 metre 30 (15 hands) in height are considered and charged as Horses.

Senders may load as many head of Cattle into the Trucks as they please, but the Railways are exonerated from all responsibility for injuries, accidents on the road and loss of Cattle.

The rates of Tariff No. 6, 3rd Category, are increased by 25 per cent. if a larger number of Cattle is loaded into a Truck* than the quantity shown hereunder.

Oxen.	Cows.	Donkeys.	Heifers.	Pigs or Calves.	Sheep or Goats.	Sucking Pigs.
Number.	Number.	Number.	Number.	Number.	Number.	Number.
8	8	10	10	20	30	100

* The bottom floor of a Belgian Cattle Truck generally measures 14 square metres, equal to 16.75 square yards.

The loading and unloading of animals, whether carried by Goods or Passenger Trains, is effected at the expense and entire responsibility of Senders and Consignees respectively.

Horses and Cattle must be accompanied by a man in charge. One man per consignment or per truck is conveyed free in the horse box or cattle trucks, but if he travels in another carriage, he pays the ordinary Passenger fare.

Dogs, irrespective of size, accompanying Passengers are charged 3rd Class Passenger fare.

Small animals in cases, baskets or crates, are conveyed by ordinary Passenger Trains on the conditions of Tariff No. 2.

The Company do not deliver to "domicile," and undertake no responsibility whatever in respect of these consignments.

SPECIAL TARIFFS.

The following statement shows the bases of the special tariffs :—

SPECIAL TARIFF No. 1—For coal, coke, stones and earth sent direct from pits for export.

1 to 84 kilometres, francs 2.20 per 1000 kilos. (minimum charge).

85 to 187 kilometres, franc 0.026 extra per kilometre.

188 to 300 kilometres, rate of 4th Class, Standard Scale, 1867*

301 kilometres and over, franc 0.02 extra per kilometre.

SPECIAL TARIFF No. 2.—For coal, coke, stones, earth, iron, ore, paving stones, gravel sand in bulk and 10 ton lots, for export provided the sending stations are situated at least 100 Kilometres (62 miles) from the Sea ports.

1 to 100 kilometres, francs 2.00 per 1000 kilos. (minimum charge).

101 kilometres and over, franc 0.02 extra per kilometre.

* See Note on pp. xl and xli.

SPECIAL TARIFF No. 3.—For paving stones, gravel, common bricks and lime in 10 ton lots or more for export.

1 to 30 kilometres, rate of 4th Class, General Standard Scale.

31 to 84 kilometres, francs 2.20 (uniform rate).

85 kilometres and over, rate of Special Tariff No. 1.

SPECIAL TARIFF No. 4.—For general export goods:—1st Category in 5 ton lots., 2nd Category in 10 ton lots.

1st Category, average between rates of 1st and 2nd Class of General Standard Scale.

2nd Category, rate of 2nd Class, General Standard Scale.

SPECIAL TARIFF No. 5.—For certain export traffic, such as beer in casks, metal refuse, &c.

Average between 2nd and 3rd Class rates, General Standard Scale.

SPECIAL TARIFF No. 6.—For castings, girders, zinc, &c., for export.

Rate of 3rd Class, General Standard Scale.

SPECIAL TARIFF No. 7.—For rough steel, grindstones, sheet iron, chalk, &c., for export.

Rate of 4th Class, General Standard Scale.

SPECIAL TARIFF No. 8 (Import).—Marble in blocks, Sulphate of Soda.

Lots of 10,000 kilos. 4th Class Rate General Standard Scale.

Iron Ore—10 tons, 4th Class Rate, Standard Scale, 1867.*
100 tons, 4th Class Rate (reduced by 75 cents.) 200 tons, 4th Class Rate (reduced by 1 franc).

Zinc, lead ores, pyrites—10 tons, 4th Class Rate, Standard Scale, 1867.* 100 tons, 4th Class Rate, Standard Scale, 1867 (reduced by 50 cents.) 200 tons, 4th Class Rate, Standard Scale, 1867 (reduced by 75 cents.)

SPECIAL TARIFF No. 9 is for import goods as per classification.

* See Note on pp. xl and xli.

1st Category—Average between 1st and 2nd Class Rates.
2nd Category—Average between 2nd and 3rd Class Rates—
General Standard Scale.

SPECIAL TARIFF No. 10.—All goods sent for Exhibition.—
First Journey—full rate. Return Journey—free.

SPECIAL TARIFF No. 11.—For iron between certain specified
stations—

1st Category, 4th Class Rate, General Standard Scale.

2nd Category, Terminal charge 1 franc. Mileage rate franc
0.03 per ton per kilometre.

SPECIAL TARIFF, No. 12.—For iron ore between certain
specified stations, in consignments of 10 tons, terminal charge,
1 franc. Mileage rate franc 0.02 per kilom. per ton, or at 4th
Class rate, General Tariff, whichever is more advantageous.

For consignments of 100 tons, 4th Class rate, General
Standard Scale, reduced by 1 franc 25 centimes.

For consignments of 200 tons, 4th Class rate, General
Standard Scale, reduced by 1 franc 50 centimes: Minimum
charge being fr. 1.35 and 1.10 respectively.

SPECIAL TARIFF, No. 13.—For iron ore and pyrites between
certain specified stations in consignments of 10 tons, 4th Class
rate, Standard Scale, 1867.* In consignments of 100 tons, 4th
Class rate, reduced by franc 0.50. In consignments of 200 tons,
4th Class rate, reduced by franc 0.75.

SPECIAL TARIFF, No. 14.—For coal between certain speci-
fied stations, same basis as for Special Tariff No. 13.

SPECIAL TARIFF, No. 15.—For coal from certain stations,
for shipment, uniform Rates without fixed basis.

SPECIAL TARIFF, No. 16.—For coal from certain mines in
10 ton lots, 4th Class rate, Standard Scale, 1867*

* The bases for 4th Class, General Standard Scale, 1867, are as follow:—
1 to 25 kilometres, terminal charge franc 0.50, mileage rate franc 0.60
per kilometre.

SPECIAL TARIFF, No. 17.—For goods from certain stations in 5 ton lots, Terminal Charge, franc 0.50. Mileage Charge franc 0.06 per kilometre per ton.

SPECIAL TARIFF, No. 18.—For articles of all descriptions sent from or to the pits of Bascoup, the same rate of the four Classes of the General Tariff, calculated according to distances fixed for Mariemont, with franc 0.20, added apply.

SPECIAL TARIFF, No. 19.—For traffic passing to and from a certain branch line, 4th Class rate, General Standard Scale, reduced by franc 0.20.

SPECIAL TARIFF, No. 20.—For the conveyance of Goods to works connected with the railway by a siding, *A.* Carriage in Trucks provided by the Railway. Rate for the four Classes, franc 0.56 per ton. *B.* Carriage in Owners' Trucks. Rate for the four Classes, franc 0.20 per ton.

SPECIAL CONTRACT TARIFFS, Nos. 22, 23 and 24, consist of rates for import traffic from Belgian Ports to certain inland stations.

The Special Tariffs for export and import traffic interchanged between different Belgian Railways are the same as those charged for local export and import traffic Nos. 1 to 16, 20 and 22, with the following two exceptions :—

- (a) The rates of the Special Tariffs in which the Western of Flanders Railway Company is concerned are uniformly increased by the addition of franc 0.10, which is specially credited to them, except in the case of Special Tariff, No. 7, the rates of which are not increased.

26 to 50 kilometres, terminal charge 1 franc, mileage rate franc 0.04 per kilometre extra.

51 to 75 kilometres, terminal charge 1 franc, mileage rate franc 0.03 per kilometre extra.

76 and over, terminal charge 1 franc, mileage rate franc 0.01 per kilometre extra.

- (b) Whenever the Special Tariffs involve the application of the 4th Class rates, the rates fixed for the 5th kilometre have been adopted (the same way as in the case of the General Standard Scales) for distances of from 1 to 4 kilometres.

LIABILITY.

The Belgian Railway Administration undertake no responsibility for a delay of six hours or less to horses and cattle, beyond which their responsibility is limited to the amount of the carriage; provided that the delay does not arise from any accidents, accumulation of traffic, or circumstances beyond the Companies' control. For Goods Traffic they are not responsible for

- Tariff No. 1. (Passenger Train), a delay of six hours or less.
 „ 2. (Goods Train), a delay of one day or less.
 „ 3. (Goods Train), a delay of two days or less.

Their responsibility is limited to one-tenth of the carriage for every day's delay beyond the fixed time of transit. After the expiration of 15 days the goods are considered lost. If they are subsequently found Consignee is entitled to take delivery on returning to the Railway three-fourths of the indemnity paid to him. Senders may insure their goods against delay by payment of a premium of 50 centimes per 1,000 frs. (5d. per £40), on the value upon which they wish to be indemnified in case of delay.

In case of loss of, or damage to goods carried by passenger train on the conditions of Tariffs Nos. 1 and 2, the Railways are responsible to the extent of 4 frs. per kilogramme (1s. 6d. per 1 lb.), and in respect of goods carried by goods train at the conditions of Tariff No. 3, 75 centimes per kilogramme (3½d.

per 1 lb.) The goods can, however, be insured for their actual value, the premium for insurance against damage or loss being 50 centimes per 1,000 frs., the same as for insurance against delay.

On payment of the two premiums the goods may be insured at the same time against delay, damage or loss, but the indemnity is in no case to exceed the actual loss sustained by the owner through the delay, damage or loss.

The Railway Administration decline all liability for damage :—

(a) Unless it be stated at the time of delivery, or within 24 hours of advice of arrival of goods to order, or if the goods are refused by consignee.

(b) If the case or packing shows no outward trace of breakage or wet.

They decline all liability for chafage, waste or leakage, or for rust to iron, steel or zinc goods.

Live animals, perishables and provisions of all kinds, chemical products, works of art (more especially pictures), goods not packed or imperfectly packed, are only carried at owner's risk without any guarantee whatsoever on the part of the Railway.

GERMANY.

THE Tariff of Rates for the conveyance of Goods Traffic in Germany is divided as follows :—

EILGUT.—Goods carried by Passenger Train.

STÜCKGUT.—Goods carried in consignments of less quantities than Wagon loads.

CLASS A1.—General Goods in Wagon loads of 5 tons.

„ B.—General Goods in Wagon loads of 10 tons.

SPECIAL TARIFF A2.—Goods in 5 ton lots included in Special Classes I., II. and III.

SPECIAL TARIFF I.	} Certain Goods specified in the Classification in Wagon loads of 10 tons.
„ „ II.	
„ „ III.	

The rates for conveyance are based on a mileage scale per 100 kilogrammes and per kilometre.

In addition to the tariff rates a fixed charge called “Terminals” is also made per 100 kilogrammes.

For local traffic carried over the Prussian State Railways or over the railways worked by the State, the following rates and terminals are charged :—

TARIFF RATES.

For the Eastern and Western Districts of the State Railways.

Per 100 kilos and per kilometre in Mark Pfénning.

EILGUT. (Passenger Train.)	Stückgut (or small consignments by Goods Train.).	Wagon Loads.		SPECIAL TARIFF.				Special Tariff Wood Included in ST. II.
		A 1	B	A 2	I.	II.	III.	
In Mark Pfénning per	100	Kilos	per	Kilometre	e.			
Double the Rates for Stückgut or Piece Goods ...	1-1	0-67	0-60	0-50	0-45	0-35	*0-26 †0-22	0-30
d.	In English money	per ton of 1,000	Kilos per	d.	d.	d.	d.	d.
4-246	d.	1-293	1-182	966	869	876	*-†02 †-425	579

Note.—*Up to 100 Kilometres.
†101 Kilometres and more.

The terminals charged in the Districts of the Eastern States Railway are as under:—

Per 100 kilos in Mark Pfénning.									
Eilgut.	Stückgut.	Wagon Loads.		Special Tariff.				Exceptional Tariff.	
		A 1	B	A 2	I.	II.	III.	Wood Special Trff. II.	
1 to 10 Kilometres	20	10	8	6	6	6	6	6	
11 „ 20 „ ...	22	11	9	6	6	6	6	6	
21 „ 30 „ ...	24	12	10	6	6	6	6	6	
31 „ 40 „ ...	26	13	11	6	6	6	6	6	
41 „ 50 „ ...	28	14	12	6	6	6	6	6	
51 „ 60 „ ...	30	15	12	9	9	9	9	9	
61 „ 70 „ ...	32	16	12	9	9	9	9	9	
71 „ 80 „ ...	34	17	12	9	9	9	9	9	
81 „ 90 „ ...	36	18	12	9	9	9	9	9	
91 „ 100 „ ...	38	19	12	9	9	9	9	9	
101 and over ...	40	20	12	12	12	12	12	12	

In English money and miles per ton of 1,000 kilos.

Up to 6-21 miles...	2/-	1/-	1/-	-9½	-7½	-7½	-7½	-7½
„ 12-42 „ ...	2/2½	1/1½	1/1½	-11	-7½	-7½	-7½	-7½
„ 18-63 „ ...	2/5	1/2½	1/2½	1/-	-7½	-7½	-7½	-7½
„ 24-84 „ ...	2/7½	1/3½	1/3½	1/1½	-7½	-7½	-7½	-7½
„ 31 05 „ ...	2/9½	1/5	1/5	1/2½	-7½	-7½	-7½	-7½
„ 37-26 „ ...	3/-	1/6	1/6	1/2½	-11	-11	-11	-11
„ 43-47 „ ...	3/2½	1/7½	1/7½	1/2½	-11	-11	-11	-11
„ 49-68 „ ...	3/5	1/8½	1/8½	1/2½	-11	-11	-11	-11
„ 55-89 „ ...	3/7½	1/9½	1/9½	1/2½	-11	-11	-11	-11
„ 62-10 „ ...	3/9½	1/11	1/11	1/2½	-11	-11	-11	-11
over ...	4/-	2/-	2/-	1/2½	1/2½	1/2½	1/2½	1/2½

The Rates on the Western States Railway, and for Traffic passing between the Eastern and Western States Railway system, are—

	Per 100 kilos in Mark Pfénning.								
	Eilgat.	Stückgut.	Wagon load.		Special Tariffs.				Exceptional Tariff.
			A 1	B	A 2	I.	II.	III.	Wood. Special T. II.
1 to 10 kilometres	20	10	10	8	8	8	8	8	8
11 „ 20 „	22	11	11	9	9	9	9	9	9
21 „ 30 „	24	12	12	10	9	9	9	9	9
31 „ 40 „	26	13	13	11	9	9	9	9	9
41 „ 50 „	28	14	14	12	9	9	9	9	9
51 „ 60 „	30	15	15	12	9	9	9	9	9
61 „ 70 „	32	16	16	12	9	9	9	9	9
71 „ 80 „	34	17	17	12	9	9	9	9	9
81 „ 90 „	36	18	18	12	9	9	9	9	9
91 „ 100 „	38	19	19	12	9	9	9	9	9
101 and over ...	40	20	20	12	12	12	12	12	12

In English money and miles per ton of 1,000 kilos.

Up to	6.21 miles ..	2/-	1/-	1/-	-/9½	-/9½	-/9½	-/9½	-/9½
„	12.42 „ ...	2/2½	1/1¼	1/1¼	-/11	-/11	-/11	-/11	-/11
„	18.63 „ ...	2/5	1/2½	1/2½	1/-	-/11	-/11	-/11	-/11
„	24.84 „ ...	2/7½	1/3¾	1/3¾	1/1¼	-/11	-/11	-/11	-/11
„	31.05 „ ...	2/9½	1/5	1/5	1/2½	-/11	-/11	-/11	-/11
„	37.26 „ ...	3/-	1/6	1/6	1/2½	-/11	-/11	-/11	-/11
„	43.47 „ ...	3/2½	1/7¼	1/7¼	1/2½	-/11	-/11	-/11	-/11
„	49.68 „ ...	3/5	1/8¾	1/8¾	1/2½	-/11	-/11	-/11	-/11
„	55.89 „ ...	3/7½	1/9¾	1/9¾	1/2½	-/11	-/11	-/11	-/11
„	62.10 „ ...	3/9½	1/11	1/11	1/2½	-/11	-/11	-/11	-/11
over	62.10 „ ...	4/-	2/-	2/-	1/2½	1/2½	1/2½	1/2½	1/2½

All consignments under 20 kilos. are charged as 20 kilos., any fraction of 10 kilos. above 20 kilos. being charged as 10 kilos.

The tariff rates are charged according as the goods are consigned, viz.:—

1. As Eilgut (Ordinary Passenger Train Service).
2. As Stückgut (by Goods Trains).
3. As Wagenladungen (full wagon loads).

I. EILGUT.—(Passenger Train).

Goods of all descriptions, in less quantities than wagon loads, consigned by Passenger Train are charged at the rates set out in the tariff, but Goods forwarded by Passenger Train in wagon loads are charged at double the general class rates for wagon loads by Goods Train.

The minimum charge by Passenger Train is 0.50 mark (6d.) per consignment.

For goods sent by Express Trains double the Passenger Train rates are charged, with a minimum of 1 mark (1s.) per consignment.

II. STÜCKGUT.—(General Merchandise).

This tariff applies to all goods traffic not forwarded by Express or Passenger Train, or in Wagon loads.

The minimum charge for Stückgut is 0.30 mark per consignment.

III. WAGON LOADS.

A.—General Tariff.

The tariff rates provided for Classes A1 and B are charged for all goods forwarded in wagon loads, which are not included in any of the special tariffs or subject to special regulations. For consignments of 5 tons or paying as for 5 tons per wagon, the rates of Class A1 are charged, and for 10 ton lots or paying as for 10 tons per wagon, the rates of Class B.

B.—Special Tariffs, I., II., and III.

The rates of the Special Tariffs are for certain goods specified in the classification, if forwarded in 10 ton lots. The same goods, if despatched in 5 ton lots or paying as for 5 tons, are charged at the rates of Class A2, unless it is more advantageous to pay carriage as for 10 tons at the rates of Special Tariff I., II., or III., as the case may be.

Wagon loads may be made up by grouping goods included in different classes, as far as their nature will permit, when forwarded by the same sender to the same consignee, in one consignment; in which case the tariff for the goods which pay the highest rate is charged for the total weight of the consignment, unless it is more advantageous to pay carriage, calculated on actual weight, and at the rate provided for each class of goods.

Explosives and dangerous articles are charged at double the rates of the general tariff for piece goods or wagon loads; the minimum charge per consignment being the carriage for five tons of the tariff rate of Class A1.

Milk, beer in casks, bread, fresh fruit, also grapes (except costly hot-house fruits, or fruits imported from southern countries at unusual seasons, which are considered as delicate fruit, and chargeable at Eilgut rates) and returned milk cans, when consigned by goods train, are conveyed by passenger train at goods rates, as far as the train service and working arrangements will allow of such traffic being so carried.

For the conveyance of Live Stock, the following rates are charged on the Prussian State Railways:

Small animals in cages, crates, cases, sacks, &c., are charged either in accordance with the Goods Tariff, or if forwarded by Passenger Train, at the Parcels Rates. Dogs belonging to Passengers are charged at 0·015 m. per head, and per kilometre, with a minimum charge of 0·10 m. (1d·2) for each dog.

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For Horses in Horse Boxes, the charge is :—

	Per Kilometre.	Per Mile. d.
for 1 horse . . .	0·30 m	5·79
„ 2 „ . . .	0·40 „	7·72
„ 3 „ . . .	0·50 „	9·66

For each additional horse carried in same truck 0·10 m. per kilometre, plus a fixed charge of 1·00 m. (1s.) per head for terminals, the minimum charge for each consignment being 3 marks (3s.).

In cases where the ordinary tariffs do not apply, the carriage for the conveyance of Live animals in wagon loads is calculated according to the space of the Railway Trucks. Any fractions up to and including half a square metre (0·598 square yard) are not charged for, but anything exceeding half a square metre is charged as for one square metre.

The charge per square metre (1·196 square yards) per kilometre is—

For horses—0·025 m. (0·30) . . .	d.	{ In the district of Berlin and Bromberg.
„ 0·03 m. (0·36) . . .	d.	
For other live stock—		{ In other dis- tricts.

0·020 m. up to 100 kilometres	d. (0·24)	{ In the districts of Berlin and Bromberg.
0·0175 m. 101 to 200 „	(0·21)	
0·015 m. 201 to 300 „	(0·18)	
0·010 m. over 300 „	(0·12)	
0·020 m.	(0·24)	{ In other dis- tricts.

For small live stock in composite trucks the above tariff of charges are increased by 33½ per cent. The fixed charge for terminals is 0·40 m. (4d·8) per square metre of the floor of the trucks.

Among other exceptional tariffs which are in force on all German Railways, there is one for European wood, which is charged at 0.30 pf. per 100 kilos. per kilometre (or 0.579d. per ton of 1,000 kilos. per mile), plus the terminals shewn in the foregoing table. There is also an exceptional tariff for coal from the Ruhr district, as under:—

Tariff rate 0.22 pf. 100 kilos per kilometre (0.425d. per ton of 1,000 kilos per mile) with terminals of—

1 to 10 kilometre 6 pf. equivalent to 6.21 miles 7.2d. per ton.					
11 „ 20	„	7 „	„	12.42 „	8.4d. „
21 „ 30	„	8 „	„	18.63 „	9.6d. „
31 „ 40	„	9 „	„	24.84 „	10.8d. „
41 „ 50	„	10 „	„	31.05 „	1s. „
51 „ 60	„	11 „	„	37.26 „	1s. 1d. „
61 & over	„	12 „	„	and over „	1s. 2.4d. „

For services which are distinct from the actual conveyance, such as marking, weighing, counting, warehousing, demurrage of wagons, and use of tarpaulins, the railway companies are entitled to make separate and additional charges. For the hauling of wagons to or from sidings, connecting coal pits or other works with the railway system, a special charge also is made by agreement.

LOADING AND UNLOADING OF GOODS.—The loading and unloading of *grande vitesse* and piece goods are effected by the railway company, those services being included in the tariff rates.

Packages which weigh more than 750 kilos (15 cwt.) or the dimensions of which exceed the space of a truck, may, at the discretion of the railway company, be required to be loaded by the sender and unloaded by the consignee.

The loading and unloading of all other goods has to be performed by senders and consignees respectively, unless the service

is undertaken by the railway company, for which a charge of 10d. per ton is made; in which case however the staff who perform the service are considered as employed by the sender or consignee respectively, with whom all responsibility rests.

COVERING OF GOODS IN OPEN TRUCKS.—It is understood that the railway company, in the absence of instructions to the contrary, convey the goods included in the Special Tariffs—except certain articles specially provided for—in open wagons, the railway being exempted from all responsibility in case of damage arising from such mode of transit. If instructions are given on the consignment note to forward in covered wagons, such goods as the railway company is entitled to convey in open wagons, the tariff rates are increased by 10 per cent.

Senders may supply their own tarpaulins for the covering of the goods, and they are returned free of charge, at owners' risk, or at the company's risk on payment of the ordinary carriage.

ARTICLES OF UNUSUAL SIZE.—Articles which, owing to their extraordinary size, cannot pass the side doors of the wagons, are charged at the ordinary rates for *grande vitesse*, if forwarded by Passenger Train, and at the piece goods rates if sent by Goods Train, with a minimum as for one ton for every wagon used, unless the charge calculated at the rates of the tariffs for wagon loads is more advantageous.

BULKY GOODS are charged 50 per cent. above the ordinary rates both by *grande vitesse*, and by Goods Train. In the case of timber, girders, and such articles which necessitate the use of guard wagons, a charge 15 pf. (1½d.) per wagon per kilometre is made in addition to the mileage rates; but no part of the articles must actually rest on the guard wagons.

The general regulations of the Goods Tariff in Germany prescribe the maximum time for delivery of goods as follows:—

(A.) For EILGUT (Goods carried by Passenger Train), one day for forwarding, and one day for every 300 kilom. (186 miles) or part thereof.

(B.) For Goods Train traffic (STÜCKGUT), two days for forwarding, and for the first 100 kilom. (62 miles), one day; for every part of each subsequent 200 kilometres (124 miles), one day.

The time of transit commences at midnight following the date of the stamp on the consignment note; and the Companies are relieved from responsibility if within the stipulated time, delivery is made to the consignee's "domicile," or if an advice note of the arrival of the goods is posted or otherwise sent to the consignee. The time allowed for delivery does not include the time occupied for Customs' formalities or other delay over which the Railway Companies have no control.

THE PRUSSIAN AND GERMAN LAW AS TO RATES.

By Article 33 of the Prussian Law relating to railway undertakings, dated 3rd November, 1838, the Commissioners were empowered, in certain events, to fix the maximum tariff. If after deducting working expenses and a fixed amount for the reserve fund, as sanctioned by the Ministers, the net profits yielded more than 10 per cent. on the capital expended, the railway rates were to be reduced so that the net receipts should not exceed 10 per cent. If, on the other hand, the receipts did not reach the maximum of 10 per cent. (Article 39), railway rates might be increased by 10 per cent. until the receipts yielded 10 per cent. on the total capital. Subject to these conditions, the fixing of the tariff rates was left to the railway companies.

Article 45 of the Constitution of the German Empire (dated

16th April, 1871) provides that the Government should secure, as much as possible, the adoption of uniform and reduced tariffs, especially for long distances for the carriage of coal, coke, wood, ore, stones, salt, rough iron, manure, and similar goods, and that such low rates should be adopted as might be required to further the interests of the trade of the country. Article 46 enacts that the railway companies in case of need, as for instance, the outbreak of a famine, should carry provisions, such as grain, flour, and potatoes, &c., at such a reduced rate as circumstances might require, and as directed by the Bundesrath Ausschuss. Such special rates are not, however, to be below the lowest rates charged by the respective railways for "raw materials."

By the terms of the early Concessions granted to railway companies the greater part of the private railway companies in Prussia had no power to fix or alter the tariff rates; reductions have to be sanctioned by the Minister. For instance,—Clause 10 of the regulations of the Crefeld-Threis-Kempener Industrie Railway Company (concession granted 6th October, 1868) provides that—

"The State reserve a right to control the tariff rates for goods, as well as passengers, and the alteration of the same."

In the same way Article 5 of the concession for the Dortmund-Gran-Euscheder Railway Company of the 8th January, 1872, stipulates—

"That the Ministers of the Royal State reserve their right to control the fares and rates for goods and passenger traffic, as well as any subsequent modifications in respect of the same."

Clause 3 of the regulations of the Bergish Markische Railway, which was transferred to the State on the 1st January, 1882 (concession dated 12th February, 1884), states that—

"The tariff for goods, as well as passengers, must

undergo no alteration without the sanction of the Royal Ministers of Finance."

In the more recent concessions the same rights have been reserved to the State Ministers ; but greater freedom is now granted to the railway companies than was permitted during the first years of working the lines. Maximum rate tariffs are fixed by the Minister of Public Works for the various classes ; and, as in England, the companies may adopt rates, and modify them as they please, as long as the maximum figures, fixed by the State, have not been exceeded.

For the Prussian States railways the tariffs are now fixed by the Royal Railway Administration, which is a species of a Provincial Court ; but before they can be put in force they must be submitted for the approval of the Minister of Public Works. The Railway Administration consist of a Chairman and eleven Directors, and there are eleven Boards of Directors to manage the Prussian States railways. For private railways the arrangements are of a similar character. The application for rates and conditions other than those published in the official tariffs is prohibited by Prussian Law of the 3rd November, 1838, relative to the working of railways. The granting of special conditions to any particular sender or consignee is therefore legally inadmissible. Any alterations in the tariff system must be submitted to the Permanent Tariff Commissioners of the German Railway Administration, appointed to study the interests of trade. They consist of thirteen members of German railways, four elected members for the protection of agriculture and trade, and (in accordance with stipulations made by Bavaria) of a representative of the Bavarian trade interests. On the proposals discussed at these Assemblies resolutions are passed by the General Conference of German Railway Administration, and the resolutions are submitted for the approval of the Courts of Judicature.

FRANCE.

THERE is no uniform scale of rates in France; each railway has its own tariff and classification. The following tables, however, are illustrations of the basis of the old tariff in force on the Western of France Railway, and of the reformed tariff adopted by the Paris, Lyons and Mediterranean Railway.

WESTERN OF FRANCE RAILWAY.

Distances, Kilometres.	CLASSES.					
	I.	II.	III.	IV.	V.	VI.
	Rate per 1,000 Kilos. per Kilometre,					
	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
Up to 100 Kilometres	16	14	12	10	8	8
„ 300 „ ... ..	...	...	...	...	...	5
Above 300 „ ... ..	...	...	...	...	...	4

MILES.	Rate per ton per Mile.					
Up to 62 miles	2d.50	2d.19	1d.88	1d.56	1d.25	1d.25
„ 186 „ ... ..	...	...	...	...	...	0d.78
Above 186 „ ... ..	...	...	...	...	...	0d.62

PARIS, LYONS, AND MEDITERRANEAN RAILWAY.

DISTANCES.		Rate per 1,000 Kilometres per Kilometre.											
		CLASSES.											
		I.	II.	III.	IV.	A	V.	B	C	D	VI.	E	F
Kilometres.		Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents.	Cents.	Cents	Cents	Cents
Up to	25	0.16	0.14	0.12	0.10	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08
26 „	30	0.16	0.14	0.12	0.10	0.09	0.08	0.08	0.08	0.05	0.04	0.04	0.04
31 „	50	0.16	0.14	0.12	0.10	0.09	0.08	0.08	0.08	0.0425	0.04	0.04	0.04
51 „	100	0.16	0.14	0.12	0.10	0.09	0.08	0.06	0.045	0.0425	0.04	0.03	0.02
101 „	150	0.15	0.13	0.11	0.09	0.08	0.08	0.06	0.045	0.0425	0.035	0.025	0.02
151 „	200	0.15	0.13	0.11	0.09	0.08	0.07	0.06	0.045	0.0425	0.035	0.025	0.02
201 „	300	0.15	0.13	0.11	0.09	0.065	0.04	0.04	0.0375	0.04	0.035	0.025	0.02
301 „	400	0.14	0.12	0.10	0.08	0.065	0.04	0.035	0.0325	0.0325	0.03	0.025	0.02
401 „	500	0.14	0.12	0.10	0.08	0.05	0.04	0.035	0.0325	0.0325	0.03	0.025	0.02
501 „	600	0.13	0.11	0.09	0.07	0.05	0.04	0.035	0.0325	0.0325	0.03	0.025	0.02
601 „	700	0.12	0.10	0.08	0.06	0.05	0.04	0.035	0.0325	0.0325	0.025	0.025	0.02
701 „	800	0.11	0.09	0.07	0.05	0.04	0.04	0.035	0.03	0.03	0.025	0.025	0.02
801 „	900	0.10	0.08	0.06	0.04	0.04	0.04	0.035	0.025	0.025	0.025	0.02	0.02
901 „	1000	0.09	0.07	0.05	0.04	0.04	0.04	0.03	0.025	0.025	0.02	0.02	0.02
1001 „	1,100	0.08	0.06	0.05	0.04	0.04	0.04	0.03	0.025	0.025	0.02	0.02	0.02

Classes A, B, C, D, E, F, apply generally to full truck loads only, and for Classes I, II, III, IV, V, and VI. The minimum charge is as for 40 kilos. (88 lbs.), fractions of 10 kilos. being charged as 10 kilos. For consignments under 40 kilos. the rate charged is 25 cents. per 1,000 kilos. per kilometre, including terminals, irrespective of distance, equal to 3d.92 per ton per mile; but the charge so calculated must not exceed what would be charged for 40 kilos. at the ordinary Class rates. The minimum charge for consignments up to 40 kilos. is 25 cents. (2½d.), and above 40 kilos. 40 cents. (4d.), inclusive of loading and unloading and station terminals.

Plated Goods, Quicksilver, Embroidery, Lace, Articles of Art (Statues, Paintings, ~~Bronze~~ Figures) are charged at the highest Class rates, plus 50 per cent.

Explosives, Inflammable and Dangerous Articles, for the conveyance of which special precautions have to be taken, are charged the highest Class rate plus 50 per cent.

BULKY GOODS, specified in the Classification, which do not weigh 200 kilos. (4 cwt.) per cubic metre (1.308 cubic yard), are charged 50 per cent. in addition to the ordinary Class rates. The carriage so calculated must not, however, exceed the amount chargeable at a computed weight of 200 kilos. per cubic metre.

PACKAGES OF EXTRAORDINARY SIZE OR WEIGHT.—The Class rates are increased by 50 per cent. for packages weighing from 3 to 5 tons, and by 100 per cent. for packages weighing over 5 tons, but not exceeding 10 tons, with a minimum in the latter case of 25 cents. per 1,000 kilos. per kilometre (3d.92 per ton per mile). Packages which weigh over 10 tons, or the dimensions of which exceed those of the ordinary rolling stock, are not carried except under special contract.

The loading or unloading of packages weighing over 5 tons must be performed by the sender or consignee respectively, and at their own risk and expense at stations which are not provided with hoisting gear.

TERMINALS.—The charges for the two services of loading and unloading and station terminals are :—

	GOODS CARRIED IN TRUCK LOADS.		IN LESS QUANTITIES.	
	Per 1000 kilos.	Per ton.	Per 1,000 kilos.	Per ton.
	cts.	s. d.	cts.	s. d.
Loading at sending station	30	0 3	40	0 4
Unloading at destination ..	30	0 3	40	0 4
Station terminals at sending station	20	0 2	35	0 3½
Station terminals at destination station ...	20	0 2	35	0 3½
Per 1000 kilos.	fcs.1-0	10d.	fcs.1-50	1 2½

Fractions of 10 kilos. are charged as 10 kilos.

Full truck loads may be loaded or unloaded by sender and consignee respectively at their option, risk and expense; in which case a reduction is made in the terminal charges of 30 cents. per ton, for each service, either loading or unloading. The station dues are charged in any case, viz : 20 cents. per ton at sending station, and 20 cents. at destination station.

If the traffic passes over different lines a further charge of 40 cents. per ton is made for transfer at the junction, which amount is apportioned in equal proportions to the two Companies between which the traffic is exchanged.

BOOKING.—A charge of 1d is made for each consignment.

WEIGHING.—Goods, which at the request of sender or consignee have to be weighed in addition to, and irrespective of the weighing by the railway company for the purpose of calculating the carriage, are subjected to a charge of 10 cents. (1d.) per 100 kilos. (2 cwt.) or part thereof. If weighed over the weigh-bridge, the charge is 30 cents. (3d.) per ton with a minimum of frs. 1.50 (1s. 2½d.) per truck or cart. If the re-weighing proves that an error in the invoiced weight was committed by the railway company to the prejudice of sender or consignee, the above charges are not made.

WAREHOUSING.—For the Warehousing of Goods, consigned to wait orders at the station, the delivery of which for some cause or other is not taken within 48 hours from the time the advice note is posted, the following charges are made:—5 cents. (one halfpenny) per 100 kilos. (2 cwt.) or part of 100 kilos. per day for the first three days after the expiration of the time fixed above, minimum charge 10 cents. (1d.), and for every subsequent day 10 cents. (1d.) per 100 kilos. or part of 100 kilos. per day.

Goods consigned to “domicile,” and which are not delivered in consequence of consignee being absent or unknown or refusing to accept delivery, are subject to the same warehouse charges, provided an advice of the cause of the non-delivery is immediately addressed by the railway company to the sender. In this case the company are entitled to charge return cartage of the goods to the station.

The same warehouse charges are made at sending stations if the goods for some cause or other cannot be despatched within 24 hours after delivery to the station; besides which, the Railway Company can decline to receive goods at their stations or quays unless they are ready for immediate dispatch.

DEMURRAGE.—For truck loads, which may be loaded or unloaded by sender and consignee respectively at their option, the following regulations apply :—At sending stations the trucks must be loaded within 24 hours from the time they are held at the disposal of sender, after which 10 frs. (8s.) per truck per day is charged. At destination stations, the trucks must be released during the day following the date of the advice sent by the railway company to consignee, provided such advice can be delivered before 5.30 p.m. on the day it is sent, failing which one day more is allowed. After the time allowed has elapsed, the railway company can at their discretion unload the trucks, and make a charge of 30 cents. (3d.) per ton, the goods unloaded being subject to the general regulations and warehouse charges; or the goods may be allowed to remain in the trucks and a charge made, after the stipulated time allowed, of 10 frs. (8s.) per truck per day. Sundays and fête days are not taken into account in the time allowed for the loading or unloading of the trucks.

CARRIAGES.—The rates charged for the conveyance of carriages are as follow :—

	Per carriage.	
	Per kilometre.	Per mile.
Carriages with 2 or 4 wheels, and one seat in the interior	0.25 cents.	(3d. 85.)
Carriages with 2 seats in the interior, omnibuses, stage coaches, &c.	0.32	„ (4d. 94.)
Furniture vans empty are charged at the rate of	0.20	„ (3d. 08.)
If loaded, an additional charge is made of 14 cents. per 1,000 kilos. per kilometre (2.16d. per ton per mile) for the contents of the van.		

HORSES AND CATTLE.—The following rates apply to the conveyance of horses and cattle by goods train :—

	Per head Per kilometre.	Per mile.
Oxen, cows, bulls, horses, mules, donkeys, and ponies ...	10 cents.	(1d.54.)
Calves and pigs... ..	04 „	(0d.61.)
Sheep, ewes, lambs, and goats... ..	02 „	(0d.30.)

Drovers, who accompany the cattle, pay the ordinary 3rd class fare.

Animals, the declared value of which is over 5,000 frs. (£200), are charged 50 per cent. in addition to the ordinary rates.

In case of any accident the Company's liability is limited to 5,000 frs. (£200) per head, unless a higher value is declared on the consignment note.

Small animals such as Sucking Pigs, Cats, Rabbits, &c., packed in crates or baskets, are charged at 1st class rate calculated on double the actual weight.

Dogs, even if in crates, are carried by Passenger Train only.

For Carriages, Horses, and Cattle the following terminals are charged :—

Booking 10 cents. (1d.) per consignment.

Loading and unloading, for carriages, frs. 2 (1s. 7d.) each.

For Oxen, Cows, Bulls, Horses, Mules, Donkeys, and Ponies, fr. 1 (10d.) each.

For Calves and Pigs, 40 cents. (4d.) each.

For Sheep, Lambs and Goats, 20 cents. (2d.) each.

No charge is made for station dues.

For carriages, which for some cause or other are not taken delivery of within 48 hours from the time of the advice being posted by the Railway Company, a charge of fr. 1 (10d.), per carriage per day is made for warehousing.

Cattle and horses, which cannot be delivered on arrival at the destination, are fed and taken care of by the Railway Company at the risk and expense of the Owner.

The time allowed for the conveyance of traffic by Goods Train on French Railways is calculated at the rate of 24 hours for every 125 kilometres ($77\frac{1}{2}$ miles), or a fraction thereof. Any fraction of and including 25 kilometres ($15\frac{1}{2}$ miles) in excess of this distance (125 kilometres), is not taken into account. Thus 150 kilometres are calculated as 125 kilometres, as shewn hereafter.

DISTANCES.		Time allowed for loading and dispatch.	Time allowed for conveyance by rail.	Total number of days, station to station, exclusive of day of delivery.
Kilometres.	Miles.			
		Days.	Days.	Days.
1 to 150	1 to 93 ...	1	1	2
151 „ 275	94 „ 170 ...	1	2	3
276 „ 400	171 „ 248 ...	1	3	4
401 „ 525	249 „ 326 ...	1	4	5
526 „ 650	327 „ 403 ...	1	5	6
651 „ 775	404 „ 481 ...	1	6	7
776 „ 900	482 „ 559 ...	1	7	8
901 „ 1,025	560 „ 637 ...	1	8	9
1,026 „ 1,150	638 „ 714 ...	1	9	10
1,151 „ 1,275	715 „ 792 ...	1	10	11
1,276 „ 1,400	793 „ 870 ...	1	11	12
1,401 „ 1,525	871 „ 947 ...	1	12	13
1,526 „ 1,650	948 „ 1,025 ...	1	13	14

For the conveyance of animals and goods paying the two highest class rates to stations on the main lines, the time of transit is fixed as follows :—

DISTANCES.		Time allowed for loading and dispatch.	Time allowed for conveyance by rail.	Total number of days, station to station, exclusive of day of delivery.
Kilometres.	Miles.			
		Days.	Days.	Days.
1 to 200=	1 to 124 ..	1	1	2
201 „ 400=	125 „ 248 ...	1	2	3
401 „ 600=	249 „ 372 ...	1	3	4
601 „ 800=	373 „ 497 ...	1	4	5
801 „ 1,000=	498 „ 621 ...	1	5	6
1,001 „ 1,200=	622 „ 745 ...	1	6	7
1,201 „ 1,400=	746 „ 869 ...	1	7	8
1,400 „ 1,600=	870 „ 994 ...	1	8	9
1,601 „ 1,800=	995 „ 1,118 ...	1	9	10

For traffic which has to pass from one line to another one day in addition to the time specified above is allowed for transfer if the transfer station is a joint station, and two days if the transfer stations are apart from each other.

NOTE.—In converting Foreign money and distances into English money and miles, the following have been taken, viz. :—

25 francs	£1
1 mark	1s.
100 pfenning	1s
1 florin	1s. 8d.
1 kilometre	•621 of a mile.
1,000 kilogrammes ...	2,200 lbs.

TOLL AND MAXIMUM RATE CLAUSES IN RAILWAY ACTS.

THE following are illustrations of the Tolls and Rates which Railway Companies have been authorised to charge in this country :—

Tolls authorised by the Stockton and Darlington Railway Act, 1821—1 and 2 Geo. IV., cap. 44, s. 62.

“ And in consideration of the great Charge and Expense which
 “ the said Company of Proprietors must incur and sustain in making
 “ and maintaining the said Railways or Tramroads, and other the
 “ works hereby authorised to be made and maintained: be it further
 “ enacted, That it shall and may be lawful for the said Company of
 “ Proprietors, from time to time, and at all Times hereafter, to ask,
 “ demand, take, recover, and receive, to and for the Use and Benefit of
 “ the said Company of Proprietors for the Tonnage of all Goods,
 “ Wares, and Merchandise, and other Things which shall be carried or
 “ conveyed upon the said Railways or Tramroads, or upon any part
 “ thereof, the Rates, Tolls, and Duties hereinafter mentioned: (that is
 “ to say),

“ For all Limestone, Materials for the Repair of Turnpike Roads
 “ or Highways, and all Dung, Compost, and all sorts of
 “ Manure, except Lime, which shall be carried or conveyed
 “ upon the said Railways or Tramroads, such sum as the
 “ said Company of Proprietors shall from time to time direct
 “ or appoint, not exceeding the Sum of Fourpence per Ton
 “ per Mile.

“ For all Coal, Coke, Culm, Cinders, Stone, Marl, Sand, Lime,
 “ Clay, Ironstone, and other Minerals, Building Stone,
 “ Pitching and Paving Stone, Bricks, Tiles, Slates, and all
 “ gross and unmanufactured Articles, and Building Materials,
 “ such sum as the said Company of Proprietors shall from
 “ time to time direct and appoint, not exceeding the Sum of
 “ Fourpence per Ton per Mile.

“ For all Lead in Pigs or Sheets, Bar Iron, Wagon Tire, Timber,
 “ Staves, and Deals, and all other Goods, Commodities,
 “ Wares and Merchandises, such Sum as the said Company
 “ of Proprietors shall from time to time direct and appoint,
 “ not exceeding the Sum of Sixpence per Ton per Mile.

- " For all the Articles, Matters, and Things for which a Tonnage
 " is hereinbefore directed to be paid, which shall pass the
 " Inclined Planes upon the said Railways or Tramroads,
 " such Sum as the said Company of Proprietors shall
 " appoint, not exceeding the Sum of One Shilling per
 " Ton.
- " And for all Coal which shall be shipped on board of any vessel
 " or vessels in the Port of Stockton-upon-Tees aforesaid, for
 " the purpose of exportation, such Sum as the said
 " Company of Proprietors shall appoint, not exceeding the
 " Sum of One Halfpenny per Ton per Mile."

By the Liverpool and Manchester Railway Act, 1826, that Company were empowered to charge maximum rates for the whole distance, 31 miles 6 chains, viz. :—

- " For all Lime, Limestone, and all sorts of Dung, Compost, and
 " Manure, and all materials for the repair of the public roads
 " and all Stone, Sand, Clay, Building, Pitching and Paving
 " Stones, Tiles and Slates, and also for all Timber, Staves
 " and Deals not exceeding Eight Shillings per Ton.
- " For all Sugar, Corn, Grain and Flour, Dyewoods, Lead, Iron,
 " and other metals not exceeding Nine Shillings per Ton.
- " For all Cotton and other Wool, Hides, Drugs, Groceries and,
 " manufactured goods not exceeding Eleven Shillings per
 " Ton.
- " For all Wines, Spirits, Vitriol, Glass, and other hazardous
 " goods not exceeding Fourteen Shillings per Ton.
- " And for any distance short of the whole length, not exceeding
 " a rateable proportion of such several sums according to
 " distance.
- " And for all Coals, Coke, Culm, Charcoal and Cinders carried or
 " conveyed along the same or any part thereof any sum not
 " exceeding Twopence Halfpenny per Ton per Mile.
- " And for all Persons, Cattle and other Animals, such reasonable
 " charge as shall from time to time be determined by the
 " said Company."

In 1835 the Toll Clauses sanctioned by Parliament were generally as follows :—

Great Western Railway Act, 1835; 5 and 6 William IV., cap. 107, s. 164, 166, 167.

“ And be it further enacted, That it shall be lawful for the said Company to demand, receive, and recover, to and for the Use and Benefit of the said Company, for the Tonnage of all Articles, Matters and Things which shall be conveyed upon or along the said Railway, any Rates or Tolls not exceeding the following: (that is to say,)

“ For all Dung, Compost, and all sorts of Manure, Lime, and Lime-stone, and Salt, and all undressed materials for the Repair of Public Roads or Highways, the Sum of One Penny per Ton per mile;

“ For all Coals, Coke, Culm, Charcoal, Cinders, Building, Pitching, and Paving Stones Dressed, Bricks, Tiles, Slates, Clay, Sand, Ironstone, Iron Ore, Pig, Bar, Rod, Hoop, Sheet, and all other similar Descriptions of wrought Iron and Castings not manufactured into utensils or other Articles of Merchandise, the Sum of Three Halfpence per Ton per Mile;

“ For all Sugar, Grain, Corn, Flour, Dyewoods, Earthenware, Timber, Staves, and Deals, Metals (except Iron) Nails, Anvils, Vices, and Chains, the Sum of Twopence per Ton per Mile;

“ For all Cotton and other Wools, Hides, Drugs, manufactured Goods, and all other Wares, Merchandise, Articles, Matters, or things, the Sum of Threepence per ton per Mile.

“ And be it further enacted, That it shall be lawful for the said Company, and they are hereby empowered to provide Locomotive or Stationary Engines or other Power for the drawing or propelling of any Articles, Matters, or Things, Persons, Cattle, or Animals, upon the said Railway, and also along and upon any other Railway communicating therewith, and to receive, demand, and recover such Sums of Money for the Use of such Engines or other Power as the said Company shall think proper, in addition to the several other Rates, Tolls, or Sums by this Act authorised to be taken.

“ And be it further enacted, That it shall be lawful for the said Company, and they are hereby authorised, if they shall think proper, to use and Employ Locomotive Engines or other Moving Power, and in Carriages or Wagons drawn or propelled thereby to Convey upon the said Railway and also along and upon any other Railway communicating therewith, all such Passengers, Cattle and other Animals

“ Goods, Wares, and Merchandise, Articles, Matters and Things, as
 “ shall be offered to them for that Purpose, and to make such reason-
 “ able Charges for such Conveyance as they may from Time to Time
 “ determine upon, in addition to the several Rates or Tolls by this Act
 “ authorised to be taken : Provided always, that it shall not be lawful
 “ for the said Company or for any Person using the said Railway as
 “ carriers to charge for the Conveyance of any Passenger upon the
 “ said Railway any greater Sum than the Sum of Threepence Half-
 “ penny per Mile, including the Toll or Rate hereinbefore granted.”

By the Great Western Railway Company's Act, 1847, the power of the Company in regard to rates and charges was reduced and limited,

“ For all Coals, Coke, Culm, Cannel, Ironstone, Iron Ore, Pig Iron,
 “ Bar Iron, Rod Iron, Sheet Iron, Hoop Iron, Plates of Iron,
 “ Slabs, Billets and Rolled Iron, Limestone, Lime, Bricks,
 “ Salt, Sand, Fire-clay, Cinders, Slag and Stone, per ton per
 “ mile One Halfpenny ; and if conveyed in carriages belonging
 “ to the Company an additional sum per ton per mile not
 “ exceeding One Farthing.

“ For all Dung, Compost, and all sorts of Manure, and all un-
 “ dressed materials for the Repair of Public Roads or
 “ Highways, Charcoal, Stones for building, pitching, and
 “ paving, Tiles, Slates, and Clay (except Fire-clay), and
 “ for Wrought Iron not otherwise specifically classified
 “ herein, and for heavy Iron Castings, including Railway
 “ Chairs per ton per mile, not exceeding One Penny ; and if
 “ conveyed in carriages belonging to the Company an addi-
 “ tional sum per ton per mile not exceeding One Farthing.

“ For all Sugar, Grain, Corn, Flour, Hides, Dyewoods, Earthen-
 “ ware, Timber, Staves, Deals and Metals (except Iron),
 “ Nails, Anvils, Vices and Chains, and for light Iron Castings
 “ per ton per mile Twopence ; and if conveyed in carriages
 “ belonging to the Company an additional sum per ton per
 “ mile not exceeding One Halfpenny.

“ For Cotton and other Wools, Drugs and Manufactured Goods,
 “ the sum of Twopence Halfpenny per ton per mile ; and if
 “ conveyed in carriages belonging to the Company an addi-
 “ tional sum per ton per mile not exceeding One Halfpenny.

- “ For Fish and all other Wares, Merchandise, Articles, Matters
 “ or Things, per ton per mile not exceeding Threepence ; and
 “ if conveyed in carriages belonging to the Company an addi-
 “ tional sum per ton per mile not exceeding One Halfpenny.
- “ And be it enacted, That the Toll which the Company may
 “ demand for the use of Engines for propelling the Carriages
 “ of other parties on the said Railways shall not exceed One
 “ Penny per mile for each Passenger or Animal or for each
 “ Ton of Goods or other Articles, in addition to the several
 “ other tolls or sums by this Act authorised to be taken for
 “ the use of the said Railways.
- “ And with respect to the conveyance of Goods, the maximum
 “ rates of charge to be made by the Company for the con-
 “ veyance thereof along the said Railways, including the
 “ Tolls for the use of the said Railways, and Wagons or
 “ Trucks, and Locomotive Power, and every expense in-
 “ cidental to such conveyance, except a reasonable sum for
 “ loading, covering and unloading of Goods, and for Delivery
 “ and Collection, and any other services incidental to the
 “ Business or Duty of a Carrier, where such services or any of
 “ them are or is performed by the Company, shall not exceed
 “ the following sums (that is to say) :—
- “ For every Horse, Mule, and other Beast of Draught or Burden,
 “ Threepence per mile.
- “ For Horned Cattle, the sum of One Penny Three Farthings per
 “ Head per Mile.
- “ For Calves, Pigs, Sheep and small Animals, One Halfpenny
 “ each per Mile.
- “ For every Private Carriage, Fourpence per mile.
- “ For all Coal, Coke, Ironstone and other Articles hereinbefore
 “ classed therewith, conveyed any distance not exceeding Fifty
 “ Miles, the sum of One Penny and One-eighth per ton per
 “ mile ; and the sum of Seven-eighths of a Penny per Ton
 “ per Mile for the whole distance travelled, if conveyed a
 “ a Distance exceeding Fifty Miles.
- “ For all Dung, Compost and other Articles hereinbefore classed
 “ therewith, conveyed any distance not exceeding Fifteen
 “ miles, the sum of One Penny Halfpenny per Ton per Mile,

- “ and the sum of One Penny and One-eighth per Ton per
- “ Mile for the whole distance travelled, if conveyed a distance
- “ exceeding Fifteen Miles.
- “ For all Sugar, Grain, and other Articles hereinbefore classified
- “ therewith, conveyed any distance not exceeding fifty Miles,
- “ the Sum of Twopence Halfpenny per Ton per Mile, and the
- “ Sum of Twopence per Ton per Mile for the whole distance
- “ travelled, if conveyed a distance exceeding Fifty Miles.
- “ For all Cotton and other Articles hereinbefore classified there-
- “ with, conveyed any distance not exceeding Fifty Miles, the
- “ Sum of Threepence per Ton per Mile; and the Sum of
- “ Twopence Halfpenny per Ton per Mile for the whole
- “ distance travelled, if conveyed a distance exceeding Fifty
- “ Miles.
- “ For Fish and all other Wares, Merchandise, Articles, Matters
- “ and Things conveyed any distance not exceeding Fifty
- “ Miles, the Sum of Threepence Halfpenny per Ton per
- “ Mile; and the Sum of Threepence per Ton per Mile for the
- “ whole distance travelled, if conveyed a distance exceeding
- “ Fifty Miles.”

By the Regulation of Railways Act, 1844 (7 and 8 Vic. cap. 85), the Government were given the right, on certain conditions, to *revise* the scale of Tolls, Rates and Charges as follows :—

“ Be it enacted, by the Queen’s most excellent Majesty, by and
 “ with the advice and consent of the Lords, spiritual and temporal,
 “ and Commons in this Parliament assembled, and by the authority of
 “ the same, That if at any time after the end of twenty-one years
 “ from and after the first day of January next, after the passing of
 “ any Act of the present, or any future Session of Parliament for the
 “ construction of any New Line of Passenger Railway, whether such
 “ New Line be a Trunk, Branch, or Junction Line, and whether such
 “ New Line be constructed by a New Company, incorporated for the
 “ purpose, or by any existing Company, the clear annual profits
 “ divisible upon the subscribed and paid-up Capital Stock of the said
 “ Railway upon the average of the three then last preceding years
 “ shall equal or exceed the rate of *Ten Pounds* for every *Hundred*

“ *Pounds of such paid-up Capital Stock, it shall be lawful for the*
 “ *Lords Commissioners of Her Majesty’s Treasury, subject to the*
 “ *provisions hereinafter contained, upon giving to the said Company*
 “ *three calendar months’ notice in writing of their intention to do so,*
 “ *to revise the scale of tolls, fares and charges, limited by the Act or Acts*
 “ *relating to the said Railway, and to fix such new scale of tolls, fares*
 “ *and charges, applicable to such different classes and kinds of Passengers,*
 “ *Goods, and other Traffic on such Railway as in the judgment of the*
 “ *said Lords Commissioners, assuming the same quantities and kinds*
 “ *of traffic to continue, shall be likely to reduce the said divisible*
 “ *profits to the said rate of Ten Pounds in the Hundred: provided*
 “ *always that no such revised scale shall take effect, unless accom-*
 “ *panied by a guarantee to subsist as long as any such revised scale of*
 “ *tolls, fares, and charges shall be in force, that the said divisible*
 “ *profits, in case of any deficiency therein shall be annually made good*
 “ *to the said rate of Ten Pounds for every Hundred Pounds of such*
 “ *Capital Stock, provided also that such revised scale shall not be again*
 “ *revised or such guarantee withdrawn otherwise than with the consent*
 “ *of the Company for the further period of twenty-one years.”*

When the earlier Railway Acts were passed, Parliament provided that the rates were to be charged equally throughout the railway.

The following is a copy of one of the Clauses that were inserted :—

“ Provided always, and be it further enacted, that the aforesaid
 “ rates and tolls to be taken by virtue of this Act shall at all times be
 “ charged equally, and after the same rate per ton per mile throughout
 “ the whole of the said Railway in respect of the same description of
 “ articles, matters or things, and that no reduction or advance in the
 “ said rates and tolls shall, either directly or indirectly, be made par-
 “ tially or in favour of or against any particular person or Company,
 “ or be confined to any particular part of the said Railway, but that
 “ every such reduction or advance of rates and tolls upon any particular
 “ kind or description of articles, matters or things, *shall extend to and*
 “ *take place throughout the whole and every part of the said Railway,*
 “ upon, and in respect of the same description of articles, matters
 “ and things so reduced or advanced, and shall extend to all persons

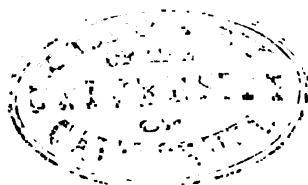
“whomsoever using the same or carrying the same description of
“articles, matters and things thereon, anything to the contrary thereof
“in anywise notwithstanding.”

In the year 1845, however, Parliament by a Public Act cancelled the prohibition against differential rates by the following Clause.

“And whereas it is expedient that the Company should be
“enabled to vary the tolls upon the Railway, *so as to accommodate*
“*them to the circumstances of the traffic*, but that such power of vary-
“ing should not be used for the purpose of prejudicing or favouring
“particular parties, or for the purpose of collusively and unfairly
“creating a monopoly, either in the hands of the Company or of par-
“ticular parties; it shall be lawful, therefore, for the Company, sub-
“ject to the provisions and limitations herein and in the special Act
“contained, from time to time, to alter or vary the tolls by the special
“Act authorised to be taken, *either upon the whole or upon any par-*
“*ticular portions of the Railway as they shall think fit*: provided
“that all such tolls be at all times charged equally to all persons and
“after the same rate, whether per ton, per mile or otherwise, in respect
“of all passengers, and of all goods or carriages of the same descrip-
“tion, and conveyed or propelled by a like carriage or engine, passing
“only over the same portion of the line of Railway under the same
“circumstances; and no reduction or advance in any such tolls shall
“be made either directly or indirectly in favour of or against any
“particular Company or person travelling upon or using the
“Railway.”

By Clause 15 of the Railway and Canal Traffic Act of 1873, it was provided that:—

“The Commissioners shall have power to hear and determine any
“question or dispute which may arise with respect to the terminal
“charges of any Railway Company, where such charges have not been
“fixed by any Act of Parliament, and to decide what is a reasonable
“sum to be paid to any Company for loading and unloading, covering,
“collection, delivery and other services of a like nature; any decision
“of the Commissioners under this section shall be binding on all Courts
“and in all legal proceedings whatsoever.”



RAILWAY RATES:

ENGLISH AND FOREIGN.

BY

J. GRIERSON,

GENERAL MANAGER OF THE GREAT WESTERN RAILWAY.

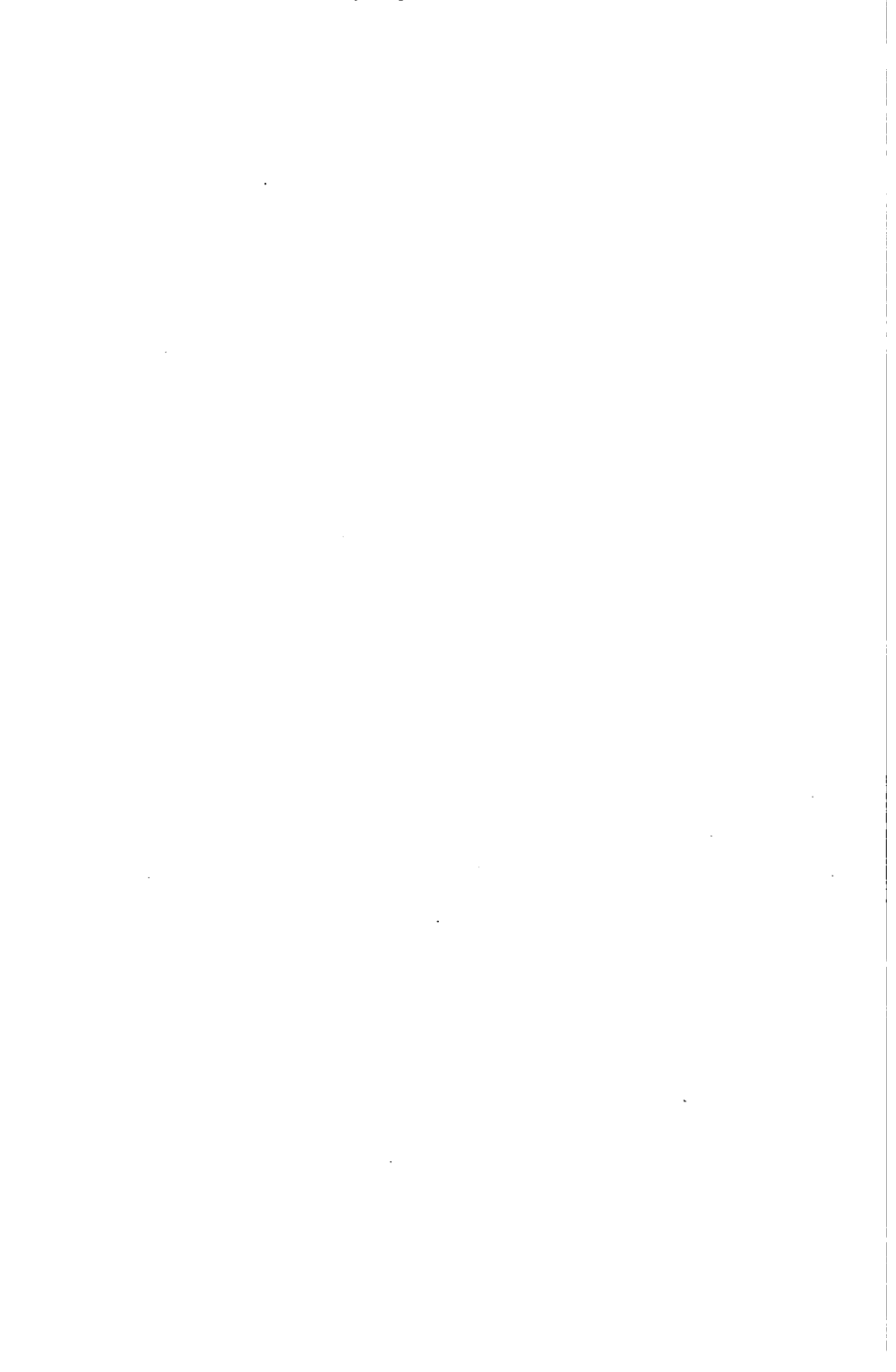
SYNOPSIS OF CONTENTS.

INTRODUCTION.—The principle upon which Rates should be based—Cost of Service—Equal Mileage Rates—Differential Rates—Grouping, here and on the Continent—Differential Rates on the Continent—The Interest of Consumers in Rates—The real Basis of Rates—New Classification—Terminal Charges—The Construction of Railways in England and on the Continent—Working of English and Continental Railways—Comparative facilities afforded by them—High Rates and their effect on Trade—Proposals for fixing Rates by Railway Commission—Conciliation Courts—Railway Amalgamation—Railways and Canals—Conclusion—Appendices—Comparison between English and Foreign Rates—Comparison of Railway receipts from Merchandise and Mineral traffic—Tariffs and Conditions for the conveyance of Merchandise traffic in Holland, Belgium, Germany and France—Toll and maximum rate clauses in Railway Acts.

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"Mr. Grierson's book will be useful to all who desire to understand what can be said in favour of the existing system."—*Bristol Evening News*, December 10th, 1886.

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have drawn freely on the materials which Mr. Grierson has so seasonably brought together, and we can only hope that the many who take an interest in the question will thereby be tempted to seek the further information at first hand."—*Herapath's Journal*, December 11th, 1886.

"No doubt he will fail to satisfy all who believe that the present rates require revision, but he must convince every reasonable person—everybody who is not blinded by ignorant prejudice—that there is a great deal to be said on behalf of the railway companies."—*Figaro*, December 25th, 1886.

"This is not an attempt to prove that all is for the best in the best possible of railway systems; but simply to shew that some of the charges brought against the companies are erroneous, others exaggerated, and many of a contradictory character. We are further reminded that the question of reform is extremely complicated, and warned against that 'vague, uninstructed notion' that 'something must be done,' which has been the bugbear of statesmen as well as directors. Hasty legislation should the more be deprecated that there is 'a fashion in so-called railway reform As to details, Mr. Grierson certainly brings out a number of facts which make for caution in drawing conclusions. Thus the figures quoted on pp. 144-48 seem to offer reasonable evidence that the exportation of iron and coal is not prejudiced by the railway rates charged in England as compared with those charged abroad Another fact to be borne in mind: the average dividend on English railways amounts to no more than 4·02 per cent., or two-fifths of the dividend which in 1844 it was considered the railways should pay."—*St. James's Gazette*, January 1st, 1887.

"His figures have been procured from many sources at home and abroad, and they are so handled as to afford very material support to the case of the British Companies. As a defence of these companies Mr. Grierson's book is by far the best statement of that side of the question which has appeared, consequently it is entitled to respectful and serious consideration at the hands of those who are not counted amongst the thick-and-thin partisans of such companies as at present managed. In saying this, we do not desire to convey the impression that Mr. Grierson's facts and figures represent solely *ex parte* advocacy of the companies; on the contrary, the book contains a large amount of information as to foreign rates, which has not previously been succinctly presented to English readers."—*Ironmonger*, December 26th, 1886.

"In his able and exhaustive work just issued Mr. Grierson has stated the case for the companies completely, though concisely. He has, in fact, produced a book which must take rank as an authority upon the subject, and one with which it behoves everyone who pretends to an opinion upon the matter to be well acquainted There are in this book arguments which must be answered, and facts and figures that will have to be faced by those who urgently call for measures of railway reform and reduction of railway rates. The work, indeed, though full is fair, and its publication should and will do much towards settling a long-voiced question upon some reasonable terms of compromise."—*Liverpool Guardian Society's Weekly Circular*, December 31st, 1886.

"The work which Mr. Grierson, the General Manager of the Great Western Railway Company, has just published on railway rates is a particularly able production, and its appearance now is very opportune Mr. Grierson's contribution to the discussion of the question abounds in facts and arguments, stated with a clearness and fairness

which do much to prepossess the reader in favour of the cause which is so ably and reasonably represented. Many people will on reading this book obtain for the first time something like a correct view of the position really taken up by Railway Companies, and the arguments with which they are prepared to support it. Many misconceptions will be removed, and the most energetic opponent of the present policy of the Companies will feel that there are, at any rate, two sides to many phases of the controversy On the whole a strong case for the Railway Companies is made out."—*British Trade Journal*, 1st January, 1887.

"The most effective contribution to the controversy that has yet been made from the Railway Managers' point of view, is a work on 'Railway Rates, English and Foreign,' by Mr. James Grierson, the General Manager of the Great Western Railway, recently issued by Mr. Stanford. Mr. Grierson, it is needless to say, is a skilled exponent of official views, and he has fortified himself with an immense mass of information drawn from Germany, France, Belgium and Holland, which he marshals in the most effective manner possible, with a view to rebutting the arguments of those who hold up the continental systems as models for England to copy, or who contrast continental railway rates with British rates to show under how much more favourable conditions continental manufacturers work than their competitors in England. It may be frankly confessed that Mr. Grierson shows that no close comparison can with justice be made between the charges upon railway systems that have been brought into existence, and are worked under conditions differing widely in every respect from those that have prevailed in England Mr. Grierson's comments and criticisms are weighty and practical, and in the matter of differential rates and terminal charges, those who dissent from his opinions will not find his arguments easy to meet."—*Liverpool Daily Post*, 8th January, 1887.

"This is a very fine work by Mr. J. Grierson, General Manager of the Great Western Railway. It is essentially a merchant's and ship owner's book, and a copy of it should be in every counting house. If such works were studied by merchants and merchants' clerks a little more, a good deal of ignorance which prevails on the subject of British and Foreign Railway rates would be cleared away. . . . We cannot too highly commend this work to the mercantile community."—*Hull Times*, 8th January, 1887.

"Now the public have the opportunity of hearing the Railway Companies' counsel. Mr. Grierson's position enables him to back his arguments with a copious array of facts. . . . On the *audi alteram partem* principle all the assailants of the present rates and working should make it a point of duty to read what Mr. Grierson has to say, for those who undertake to judge a righteous judgment it is absolutely essential to be acquainted with his facts and references, and even for those who prejudge, it is convenient to know what is the line of defence."—*Birmingham Daily Post*, 7th January, 1887.

"Quite worthy of the position and traditions of the line he manages is Mr. Grierson's recent book on 'Railway Rates, English and Foreign,' which from its admirable arrangement, lucid language and courteous if vigorous tone of controversy, deserves to become a commercial classic."—*Birmingham Daily Gazette*, 10th January, 1887.

"To an economic question which yields to few in its pressing importance a valuable contribution has just been made by Mr. Grierson, General Manager of the Great Western Railway, entitled 'Railway Rates, English and Foreign.'"—*Wednesbury Herald*, 18th December, 1886.

"Mr. Grierson now comes forward in a new character, the literary champion of British Railway Companies in reply to the severe criticisms on our own Railway Rates, in comparison with those prevailing on the Continent He has said much and said it well; and indeed he has shewn himself an able advocate for the great interest he represents. The volume is a complete storehouse of facts and figures He has clearly defined the lines of the controversy, he has told with admirable effect what the Companies have to say."—*Weekly Bulletin*, 25th December, 1886.

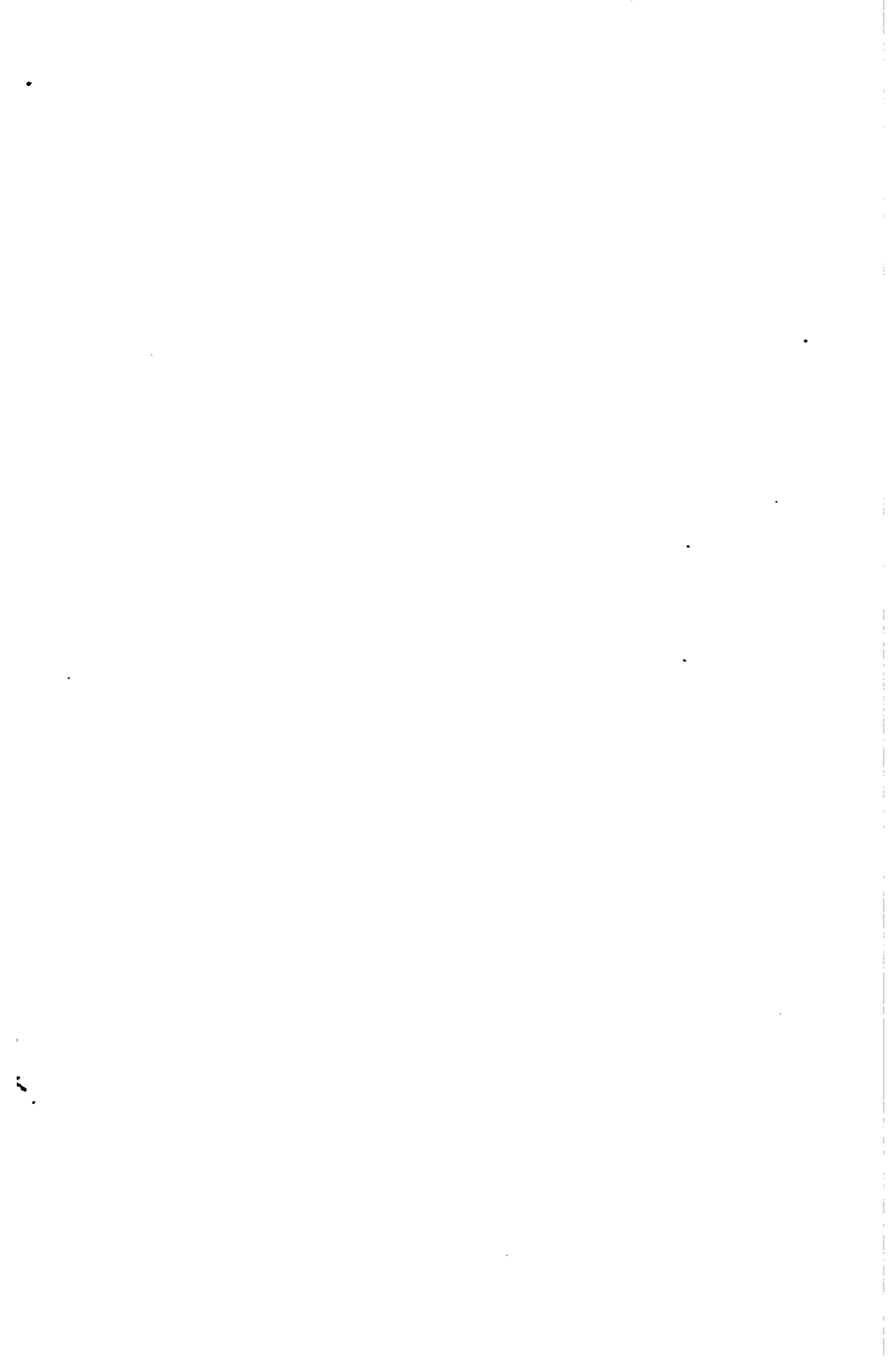
"Mr. Grierson's contribution to the controversy respecting Railway Rates is of a valuable character, stating the case on behalf of the Companies plainly and clearly, and adducing very strong arguments and a vast array of facts and figures in support of the position they have taken up . . The subject of differential rates is treated most exhaustively The question of Terminal Charges is exhaustively discussed by Mr. Grierson."—*Bristol Mercury*, 8th January, 1887.

Mr. J. Grierson has written a most interesting defence of the present system of Railway Management It is seldom that so readable a work is issued on a subject so apparently dry There are many other interesting features in this work, and none more so than the comparisons of the workings of English and Foreign Railways."—*Bristol Times and Mirror*, 6th January, 1887.

"I should advise all who can to obtain this little work and read it. It is quite a text book of railway management, and I must say that while I sat down to read it with a strong prejudice against the railways, I found it had gone long before I had finished it. It gives, in very fair style, that 'other side' which Englishmen always like to hear."—"H. F. M. Farmer's Column," *Bristol Times and Mirror*, 15th January, 1887.

"Mr. Grierson has done excellent service to the railway interest as well as to the public, by the preparation of this very useful and complete work. . . . The opinions expressed as to the principle upon which railway rates should be based are indisputably sound. . . . For more complete information and facts upon other matters of great importance to the railway companies and the public generally, we commend to our readers—notably to those who profess to be dissatisfied with the present state of affairs—a careful study of this work. Some chapters on the comparison of the working of English and Continental railways are specially deserving of attention, and the facts given are well calculated to remove much misapprehension which appears to exist on the subject."—*Railway Record*, 15th December, 1886.

"Mr. James Grierson has laid the railway world under a deep obligation by the publication of 'Railway Rates, English and Foreign.' . . . The facts and arguments, presented in clear, firm, incisive language, cannot fail to impress, instruct, and interest whoever this vast question in any way affects."—*Railway Official Gazette*, January, 1887.



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